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Paddys Ranges State Park



Management Plan January 2010

**PADDYS RANGES STATE PARK
MANAGEMENT PLAN**

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Acknowledgements

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

Parks Victoria is grateful to all those organisations and individuals who have contributed to this Management Plan.

Note

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

Disclaimers

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

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

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

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FOREWORD

Paddys Ranges State Park protects an important remnant of Box-Ironbark forest and woodland. The past history of gold mining and timber harvesting has modified the natural landscape, but now adds interest to some areas of the park.

The park will be managed as a world-class protected area for biodiversity and heritage conservation. The park offers the people of Maryborough and surrounding towns a natural setting for a range of recreational opportunities consistent with this status.

The park is of particular importance to the Dja Dja Wurrung people. Parks Victoria seeks to reflect their interests, rights and aspirations for the park in its management.

Other community groups, including Landcare and Friends groups, play an active role in park management through monitoring programs and research activities.

The park provides habitat for a range of threatened flora and fauna, notably Lowly Greenhood, Brilliant Sun-orchid, Crimson Sun-orchid, Brush-tailed Phascogale, Swift Parrot, Regent Honeyeater, Painted Honeyeater, Diamond Firetail, Grey Goshawk, Powerful Owl, Brown Toadlet and Southern Toadlet.

Evidence of past gold mining associated with the Maryborough goldfield can be seen within the boundaries of the park.

This plan details the values and attractions in Paddys Ranges State Park and is a strategic guide in their protection and management into the future. It was completed following careful consideration of the 85 submissions received from the public on the Draft Plan.

I thank those individuals and organisations who made submissions, and encourage everyone to continue to enjoy and appreciate the park and become involved in its management.

GAVIN JENNINGS MP
Minister for Environment & Climate Change

APPROVED MANAGEMENT PLAN

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

Parks Victoria recognises the important contributions that members of the community who know and value the area can make to its management. Through this plan, Parks Victoria seeks to strengthen its relationships with individuals and groups with particular interests in the park, and encourage them to participate

in its management. Parks Victoria is encouraging these groups to become further involved with the park by supporting its management with their knowledge, skills and enthusiasm.

The plan provides the basis for the future management of Paddys Ranges State Park. It was finalised following consideration of the 85 submissions received on the Draft Management Plan.

GREG WILSON
Secretary to the Department of Sustainability and
Environment

MARK STONE
Chief Executive
Parks Victoria

INTRODUCTION TO BOX–IRONBARK PARKS

The Box–Ironbark forests and woodlands lie inland of the Great Dividing Range in northern Victoria. Extending in a broad band from Wodonga through Chiltern, Beechworth and Benalla, they reappear near Numurkah and continue through Heathcote, Bendigo, Maryborough and St Arnaud to Ararat and Stawell. At the time of European settlement they covered almost three million hectares, or 13% of Victoria.

Box–Ironbark forests and woodlands are unique to Australia, valued by local communities and celebrated in literature and art. The landscapes of the region have also inspired poets, writers and artists, both past and contemporary, including Banjo Patterson and Steele Rudd. With the creation of a highly protected system of parks and reserves in 2002, the future of these forests and woodlands in Victoria is assured.

Paddys Ranges State Park protects 2010 ha of remnant Box–Ironbark forest and woodland, including nationally significant flora and fauna. The park also provides recreation opportunities for a wide range of park users, particularly residents of Maryborough. The park is the largest area of public open space close to the town.

Box–Ironbark areas are part of *Country* of the Traditional Owners. There are many areas rich in archaeological, cultural and spiritual significance throughout the region. Increasingly, Indigenous communities are becoming involved in protecting and sharing the region's Indigenous heritage.

Box–Ironbark forests and woodlands contain some of Victoria's most significant historic gold mining landscapes and features on public land, including areas of national cultural heritage significance. This has been recognised in the establishment of Castlemaine Diggings National Heritage Park, the first of its kind in Australia. These landscapes and sites are associated with many former gold towns and settlements, and combine with them to form a region of strong historic character and interest. The historic gold mining landscapes are significant components of tourism in the region today.

The Box–Ironbark forests have been associated with agriculture, gold mining and forestry since the 1830s. The major reefs and underground ore bodies helped establish and maintain towns and, together with forest products, contributed greatly to the State's economic development.

Different people value the forests in different ways, but local communities have strong feelings of pride in and ownership of their Box–Ironbark landscapes. The creation of the Box–Ironbark parks presents further opportunities to celebrate, protect and enhance these special landscapes.

Because much of the Box–Ironbark area was suitable for grazing and other forms of agriculture and coincides with Victoria's gold country, European settlement has had a substantial impact. More than 80% of the area has been cleared, and nearly all the remainder (496 000 ha, of which 372 000 ha is on public land) has been affected by grazing, timber cutting and other pressures from settlement. Past land uses have also contributed to region-wide problems of pest plants and animals, salinity and soil erosion.

While gold mining had a significant initial impact on these environments, it also paradoxically contributed to their protection. To ensure supplies of timber for mining needs, the government established forest reserves. These became the setting for settlements and the backyards for local people growing up in the area. Some are the basis of today's parks and reserves.

Although dominated by box and ironbark eucalypts, the Box–Ironbark forests are not uniform. Six broad vegetation and landscape types and 73 ecological vegetation classes are recognised. Before the arrival of Europeans, the most extensive classes were Plains Grassy Woodland, Grassy Woodland and Box–Ironbark Forest, which are all now endangered or depleted.

As a result of fragmentation and loss of habitat, almost 300 of 1500 flowering plant species and 53 of 250 vertebrate fauna species in the Box–Ironbark region are threatened. Many species, particularly birds, are in an

ongoing state of decline. A key aim of Box–Ironbark conservation and management is therefore the recovery of species, as well as the protection of those species not currently threatened.

One of the greatest losses has been that of large old box and ironbark trees, which produce reliable and abundant nectar, supply foraging sites such as peeling bark and fallen timber for ground-dwelling animals, and have hollows vital for many native mammals and birds. Instead of a landscape of large old and widely spaced trees, much is dominated by multi-stemmed coppice regrowth.

In October 2002, after many years of study and debate, the Victorian government proclaimed a number of parks designed primarily to protect and enhance the natural and cultural values of some of the remaining original Box–Ironbark forests. The parks were also to be available for a range of appropriate recreational activities and for community enjoyment and appreciation. They comprise five national parks, five State parks, seven regional parks, two historic parks and reserves and one national heritage park. There are also some 300 conservation reserves to help link these park areas, bringing some connectivity to an otherwise fragmented landscape.

Some of the parks, such as Chiltern–Mt Pilot and Greater Bendigo National Parks, are extensions of existing parks; others, such as Heathcote-Graytown National Park and Broken Boosey State Park, are completely new. Together they are a significant step towards halting the decline of threatened species in the Box–Ironbark forests and woodlands, increasing community recognition of the values of the forests and woodlands, and improving opportunities to develop tourism and related industries.

The parks should not be seen as separately managed ‘islands’ but as reservoirs of biodiversity within a broader landscape. Protecting and enhancing natural values on other public and private land in the region is vital, improving and connecting habitat for native species. The parks and the people who manage them are an integral part of local communities, and these communities in turn will play a key role in their protection, promotion and management.

The long-term protection of the region’s cultural heritage and biodiversity, including that of its parks and reserves, relies on the community fostering a strong sense of custodianship of the parks and reserves and the landscapes of which they are an important part. The plan seeks to rebuild the natural linkages in a fragmented landscape through the goodwill of the community together with the help of land managers and the government, while respecting cultural, economic and community associations with the land.

Because of their rich Indigenous and European heritage, in addition to their natural attractions, the Box–Ironbark parks are likely to have a growing significance for Victorians and visitors from interstate and overseas in the years ahead. The parks may not be major tourism attractions in their own right, but they are an integral part of the character of growing regional cities such as Bendigo. They have great potential as destinations for people who come to the region for other reasons, such as seeking social, recreational, sporting or heritage experiences. Indigenous communities could also support the development and delivery of Box–Ironbark experiences and products for visitors.

This plan explains these values and attractions in detail for Paddys Ranges State Park, and sets out how they will be protected and managed.

SUMMARY

Paddys Ranges State Park (2010 ha) protects an important remnant of Box–Ironbark forest and woodland two kilometres south-west of Maryborough in north-central Victoria. The park provides habitat for a range of threatened flora and fauna, notably Lowly Greenhood, Brilliant Sun-orchid, Crimson Sun-orchid, Brush-tailed Phascogale, Swift Parrot, Regent Honeyeater, Painted Honeyeater, Diamond Firetail, Grey Goshawk, Powerful Owl, Brown Toadlet and Southern Toadlet.

The park lies within the *Country* of the Dja Dja Wurrung. The park contains Aboriginal places and objects that are significant to Indigenous people. Their active involvement in the management and care of the park is important to their identity and wellbeing, and the park.

Evidence of past gold mining associated with the Maryborough goldfield can be seen at several sites within the park.

The park provides local Maryborough residents and the broader community with recreational opportunities in an accessible natural setting, and is highly valued for conservation in an otherwise modified landscape. Popular recreational activities include bushwalking, car touring, camping, picnicking, bird watching, nature study, prospecting, horse riding and cycling.

The park will be managed as a world-class protected area for biodiversity and heritage conservation, and for outdoor recreation that is consistent with this status. Restoring ecological values and maintaining visitor facilities that are in keeping with the scale and relatively undeveloped character of the park will be important management goals.

Key management directions for the park are summarised as follows:

- In the long-term, restore vegetation communities to a more natural structure, and increase their habitat diversity.
- Maintain viable populations of threatened flora and fauna.
- Encourage and support research into the management requirements of significant plant and animal species and communities.
- Control and, if practical, eradicate pest plants and animals that could threaten park values.
- Minimise soil erosion, habitat fragmentation, visual impacts and illegal rubbish dumping.
- Protect Aboriginal places and objects.
- Protect and conserve post-settlement cultural places and relics as appropriate.
- Respect, promote and interpret Indigenous knowledge relating to *Country* in accordance with the views of the Traditional Owners.
- Encourage and support community involvement in the park's management, particularly people with traditional or historical associations, or other special interests, in the park.
- Encourage linkages between park habitat and remnant habitat on other public and private land.

This management plan replaces the previous *Paddys Ranges State Park Management Plan* (Parks Victoria 1997).

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1 INTRODUCTION

1.1 Location and planning area

Paddys Ranges State Park (2010 ha) is approximately 164 km north-west of Melbourne and 2 km south-west of the Maryborough township (figure 1).

The planning area is the whole of Paddys Ranges State Park (figure 1).

1.2 Creation of the park

Paddys Ranges State Park (1670 ha) was originally proclaimed under Schedule Two B of the *National Parks Act 1975* (Vic.) on 27 October 1989 under the *National Parks (Amendment) Act 1989* (Vic.) following government acceptance of the former Land Conservation Council (LCC) recommendations for the Northern Central Study Area (LCC 1981) (appendix 1). The park was originally named 'Paddy' Ranges State Park, with the name changed to 'Paddys' in 1991.

Five hectares of land were added to the park on 3 August 1995 under the *National Parks (Yarra Ranges and Other Amendments) Act 1995* (Vic.). The park was increased to 2010 hectares on 30 October 2002 as a result of the *National Parks (Box–Ironbark and Other Parks) Act 2002* (Vic.) to include part of Wareek State Forest and to consolidate the park boundary.

1.3 Plan development

This Management Plan for Paddys Ranges State Park was prepared by Parks Victoria on the basis of existing information, reports and research findings that relate to the area, including:

- *Paddys Ranges State Park Management Plan* (Parks Victoria 1997)
- *Box–Ironbark Forests and Woodlands Investigation Resources and Issues Report* (ECC 1997)
- *Box–Ironbark Forests and Woodlands Investigation Final Report* (ECC 2001)
- *Victorian Government Response to Environment Conservation Council's Box–Ironbark Forests and Woodlands*

Investigation Final Report (Government of Victoria 2002)

- *Recreation Framework for Box–Ironbark Public Land* (DSE 2003a).

The plan is informed and supported by a range of best practice management systems. Significant input of information and advice was sought and received from communities, groups, individuals and agencies with particular interests in the park. Information concerning the planning process was distributed through local community networks, and posted on Parks Victoria's website. A community information field day and a risk assessment workshop were undertaken as part of the public consultation process. Opportunity to comment was made available through 'Have Your Say' feedback forms.

The existing approved Management Plan (Parks Victoria 1997) covers 1675 ha of the park. A review of progress in implementing the existing plan was undertaken following the addition of part of the adjacent Wareek State Forest to the park in 2002.

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

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

The Draft Management Plan was published for public comment in July 2007, and 85 submissions were received (appendix 2).

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

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

- up to date information on the historical accounts of the use of fire by Aboriginal communities
- more information about the Victorian temperate-woodland bird community, which is found in the park and is listed under the Flora and Fauna Guarantee Act
- more information about the loss of coarse woody debris from Victorian Native Forests and Woodlands, which is identified as a threatening process under the Flora and Fauna Guarantee Act
- exclusion of firewood collection in the park in accordance with management

actions identified in the approved Action Statements for Lowly Greenhood and Brilliant Sun-orchid under the Flora and Fauna Guarantee Act

- updated rare and threatened flora and fauna information (appendices 3 and 4)
- replacement of existing fireplaces with communal gas barbecues and/or suitable alternative barbecue facilities that will not depend on firewood collection within the park.

This management plan replaces the *Paddys Ranges State Park Management Plan* (Parks Victoria 1997) and will direct future management until reviewed (section 9.3).

2.1 Regional context

The Paddys Ranges State Park forms part of the Goldfields bioregion. Only 25% of this bioregion is covered with native vegetation, and of this remaining vegetation less than 1% is protected in the park (Government of Victoria 2002).

The area abutting the park is largely freehold land cleared for agriculture or for rural residential development associated with the township of Maryborough. One third of the park is bounded by forested land, including the Maryborough Regional Park and areas of State forest. These parks and forests collectively play an important role in conserving native flora and fauna in the Loddon River Catchment.

Nearby parks, reserves and forests that complement the natural, cultural and recreational values of the park include:

- Maryborough Regional Park, including the wildflower reserve, valued for wildflower displays and low-impact nature-based recreation
- Bristol Hill Reserve, valued for its mining heritage and scenic views from the memorial lookout tower over Maryborough township and surrounding areas, including the park
- Percydale Historic Area in the Pyrenees Ranges, which protects relics of 19th century gold mining
- St Arnaud Range National Park, valued for its distinctive Box–Ironbark Forests, Grassy Woodlands, rocky escarpments and recreational opportunities adjacent to the Upper Teddington Reservoir
- Castlemaine Diggings National Heritage Park and Maldon Historic Reserve, comprising mainly regrowth Box–Ironbark Forest and notable for relics from the gold mining era
- State forest, including Wareek, Daisy Hill and Craigie State Forests, which provide for multiple uses and complement recreational activities within the park.

Prospecting for gold is one of the most popular recreational activities in the region and attracts many tourists. Other recreational opportunities include bushwalking, picnicking and cycling in the region’s bushland areas and fishing at Cairn Curran Reservoir. Dispersed camping is permitted in State forest areas surrounding the park, and accommodation ranging from caravan parks to motels and bed & breakfasts is available at Maryborough.

Indigenous tradition indicates that the park is part of *Country* of the Dja Dja Wurrung.

The park is within the Central Goldfields Shire. Regional population centres include Maryborough, Carisbrook, Dunolly, Bealiba, Talbot and the rural districts surrounding these centres.

The park is also within the boundaries of Tourism Victoria’s Goldfields product region, with its spectacular historic towns, architecture and gold history. A Tourism Information Centre is located at Maryborough.

2.2 Park significance and values

Paddys Ranges State Park makes a valuable contribution to Victoria’s parks and reserves system, which aims to protect viable, comprehensive, adequate representative samples of the State’s natural environments. The park also provides opportunities for visitors to enjoy and appreciate the natural environment and natural and cultural features.

The park is assigned the International Union for the Conservation of Nature and Natural Resources (IUCN) Category II of the United Nation’s List of National Parks and Protected Areas. Category II National Parks and Protected Areas are managed mainly for ecosystem conservation and recreation. On a statewide basis, the park is rated as moderate for the protection of natural values.

Significant features of the park include the following:

Natural

- Box–Ironbark Forest (Western Goldfields) floristic community, which supports over 232 native vascular plant species including nine threatened species (appendix 3).

- The vulnerable Alluvial Terraces Herb-rich Woodland within the Goldfields Bioregion.
- Habitats supporting populations of a diverse range of native fauna, including 130 bird and eight mammal species. Fifteen bird, one mammal and two amphibian species are threatened (appendix 4).

Cultural

- Aboriginal cultural knowledge, tradition, places and objects, including scarred trees, isolated artefacts and camp sites.
- Diverse non-Indigenous cultural history including gold mining, eucalyptus oil distilling, timber harvesting and farming.

Recreation and tourism

- Easy vehicular access from Maryborough and for visitors touring the Western Goldfields.
- Opportunities for a wide range of nature-based recreational activities such as walking, scenic driving, camping, picnicking, bird watching, nature study, prospecting, horse riding and cycling.
- Opportunities for understanding and appreciating the contribution of the park to the Western Goldfields through education and interpretation of the natural and cultural values.

2.3 Evidence of past use

The imprint of past human activities can be observed at several places in the park, as well as in the overall landscape.

The Box–Ironbark Forests and Woodlands provided Indigenous people with timber and plants for shelter, medicine, canoes, spears, shields, nulla nullas (clubs), boomerangs, tools and dishes (ECC 2001).

Seasonal burning was probably undertaken by Indigenous people, but little direct evidence exists and what evidence there is relates to landscape wide observations that are not site or vegetation specific (Tolsma et al. 2007).

The structure of the forest landscape of most of the park attests to its history of cyclical timber harvesting, evidenced by coppiced trees with

small diameters and a general lack of large trees and woody debris on the ground. Timber harvesting occurred in much of the area, now park, from the time of the gold rushes in the 1850s, until proclamation of the park in 1989.

While the whole landscape reflects past utilisation activities, the park also contains several specific heritage places including miner's dams, puddling machines, hut sites and an ore crushing battery. One of these is Hamilton's eucalyptus distillery near Reserve Dam, where the foundations of the distillery and remains of two huts can be seen. The still is thought to have operated from World War I until the 1930s (A. Branch, pers. comm.).

There is also evidence of the water race from the picnic area to the Goldfields Reservoir, which was constructed in 1878 to supply water to Maryborough.

2.4 The park visitor

Paddys Ranges State Park attracts approximately 8000 visitors annually, including many residents from the nearby towns of Maryborough, Talbot and Avoca. Visitation in the park is closely associated with visitation to Maryborough. The Maryborough Information Centre receives approximately 65 000 visitors annually. The park is easily reached from the town, which is serviced by hotels, motels, caravan parks and bed and breakfast accommodation.

The park offers a diverse range of nature-based recreational opportunities for walking, picnicking, birdwatching, nature study, prospecting, horse riding and cycling. Prospecting is confined to designated areas to minimise conflicts with other park users and protect conservation values. Horse riding and cycling are confined to roads to minimise impacts on park values.

In accordance with the Box–Ironbark Visitor Services Strategy (Parks Victoria 2005a), Paddys Ranges State Park is rated as a regional and localised value park for the provision of visitor services. The natural values of the park will be promoted as a priority, while resources for visitors will focus on the camping area and picnic area, which are the principal visitor sites in the park.

2.5 Legislation and ECC recommendations

Legislation

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

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

The *Aboriginal Heritage Act 2006* (Vic.) applies to the park and protects all Aboriginal cultural heritage values, including places, objects and Aboriginal human remains (section 5.1).

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

The *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) applies to the whole of the park with respect to actions that have, will have, or are likely to have a significant impact on matters of national environmental or cultural significance.

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

Other legislation, and policies and guidelines (section 2.6) at both the Commonwealth and State levels apply to management of the park and specific activities and uses.

ECC Recommendations

The former Environment Conservation Council (ECC), in its *Box–Ironbark Forests and Woodlands Investigation Final Report* (ECC 2001), made a number of recommendations that relate to the park. These include the following recommendations:

- B5 Use of Paddys Ranges State Park (B5) in accordance with the general recommendations for State Parks.
- R8 Land managers continue with and further develop adaptive management research and monitoring programs, develop targeted new programs and apply the results where appropriate.
- R15 Planning and management relating to traditional interests and uses be based on recognition and respect for the traditional and contemporary relationship of Aboriginal peoples with the land.
- R42 Box–Ironbark public lands be available for a range of recreation activities for community enjoyment and appreciation and appropriate to the land use category.

All of these recommendations were accepted by the State Government in February 2002 (Government of Victoria 2002).

2.6 Policies and guidelines

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

- *Indigenous Partnership Strategy and Action Plan* (Parks Victoria 2005b)
- *Recreation Framework for Box–Ironbark Public Land* (DSE 2003a)
- *Heritage Management Strategy* (Parks Victoria 2003)

- *National Strategy for Ecologically Sustainable Development* (COAG 1992)
- *National Strategy for the Conservation of Australia's Biological Diversity* (ANZECC 2001)
- *Victoria's Biodiversity Strategy* (NRE 1997)
- *Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites* (Parks Victoria 2002)
- *North West Region Fire Protection Plan, Bendigo Fire District* (DSE 2003b)
- *Code of Practice for Fire Management on Public Land* (DSE 2006a)
- *Guidelines and Procedures for Ecological Burning on Public Land in Victoria* (DSE 2004).

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

- *Victoria's Nature-based Tourism Strategy 2008–2012* (Tourism Victoria 2008)
- *Policy for Sustainable Recreation and Tourism on Victoria's Public Land* (NRE 2002b)
- *North Central Regional Catchment Strategy 2003–2007* (NCCMA 2003)
- *Victoria's Heritage — Strengthening Our Communities* (Heritage Victoria 2006).

3 STRATEGIC DIRECTIONS

3.1 Vision

Paddys Ranges State Park is renowned for its striking wildflower displays and diverse birdlife, and recognised as an important community asset, conserving a viable remnant of the Box–Ironbark forests and woodlands that once covered much of northern Victoria.

Management of the park is conducted in partnership with the community and is based on sound knowledge, including that of Traditional Owners, and the general community's views and aspirations for the park. Park management is focused on restoring the ecological integrity of the area, and preserving and conserving its biological and cultural values.

The park provides habitat for viable populations of indigenous threatened species, including Lowly Greenhood, Brilliant Sun-orchid, Crimson Sun-orchid, Brush-tailed Phascogale, Swift Parrot, Regent Honeyeater, Painted Honeyeater, Diamond Firetail, Grey Goshawk, Powerful Owl, Brown Toadlet and Southern Toadlet.

The cultural heritage of the landscape, including the knowledge, places and objects of Traditional Owners and knowledge and relics of the gold mining era, are widely appreciated by the community.

There are opportunities for bird watching, nature study, bushwalking, camping, car touring, prospecting, cycling and picnicking, and for four wheel driving and horse riding. The high-quality visitor facilities are in keeping with the scale and undeveloped character of the park. Increased visitor use is sensitively and sustainably managed.

3.2 Management directions

A risk assessment workshop was undertaken as part of the planning process to systematically evaluate the risks that hazards pose to high-priority natural values (Raulings 2006). The results of the workshop have assisted in the management planning process and helped to steer the management directions for the park.

Major management directions for the park are outlined below:

- The Traditional Owners' knowledge and interests in the area, and aspirations for *Country* will be reflected in the park's planning and management, in accordance with legislation and policies (Parks Victoria 2005b).

Natural values conservation

- In the long-term, a more natural structure will be restored to vegetation communities through ecological thinning to increase their habitat diversity.
- Viable populations of threatened flora and fauna will be maintained.
- Research into the management requirements of threatened plant and animal species and communities will be encouraged and supported.
- Containing emerging threats including pest plants and animals and reducing these at a local scale in the long-term will be priority.
- Soil erosion, habitat fragmentation and visual impacts will be minimised by closing and rehabilitating unnecessary and informal vehicle tracks.
- The impacts of wallaby and kangaroo grazing pressure on vegetation communities and threatened flora will be investigated and managed.

Cultural values conservation

- Aboriginal places and objects will be protected from interference or damaging activities.
- Historic relics and places will be conserved by protecting them from damaging or inappropriate activities.
- Indigenous cultural obligations relating to *Country* will be respected, and Traditional Owners' and Indigenous communities' knowledge promoted and interpreted in accordance with their views.

- The impact of any works and infrastructure on the park's natural and cultural values will be minimised by careful planning, design, siting and construction activities.
- Research into Indigenous cultural heritage and historic heritage of the park will be encouraged and supported as appropriate in consultation with the Indigenous and wider communities.

The park visit

- Visitor understanding and appreciation of the park's natural and cultural values will be enhanced by a range of information services and interpretation and education programs.
- Visitor enjoyment will be enhanced by appropriate management of recreation activities.
- Maintain a range of quality recreation experiences.
- Visitors will be encouraged to adopt minimal-impact techniques and to adhere to industry-developed standards appropriate to their activity.

Community awareness and involvement

- Strong collaborative partnerships will be developed with the relevant registered Aboriginal Party to facilitate the reflection of Indigenous knowledge, interests and aspirations, in the park's planning and management.
- Friends, volunteers and other interest groups will be encouraged to develop an understanding and appreciation of the park's values and the rich and diverse knowledge and aspirations of the traditional owners and indigenous communities.
- The wider community will be encouraged to become more aware of the park and appreciative of its values.
- Local communities and visitors will be encouraged to develop a sense of custodianship for the park and become involved in its management via a range of avenues including Friends groups.

- Strong cooperative relationships will be developed and maintained with communities or groups that are interested in the park's management, to support and strengthen their appropriate involvement.
- Collaborative partnerships will be established with relevant agencies to progress areas of mutual interest which strengthen protection of the park.
- Ongoing opportunities will be provided for communities, groups, individuals and other agencies to share their interests and concerns relating to the park with the park's management.

3.3 Zoning

A park management zoning scheme has been developed to:

- provide a geographic framework in which to manage a park
- reflect the sensitivity, fragility and remoteness of natural values
- 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 activities and the protection of the park's values
- provide a basis for assessing the suitability of future activities and development proposals.

A Conservation and Recreation Zone applies to the whole of the park. Three overlays — Land Use Designation – Prospecting, Special Management Area – Research and Special Protection Area – Natural Values — highlight management requirements in addition to those of the underlying zone.

The zone and overlay characteristics are described in table 1, recreation opportunities in table 2 and their boundaries are shown in figure 2.

TABLE 1 MANAGEMENT ZONE AND OVERLAYS

ZONE/OVERLAY	AREA/LOCATION	VALUES	MANAGEMENT AIM
MANAGEMENT ZONE			
Conservation and Recreation	2010 ha; 100% of the park.	Important natural values and scope for recreation opportunities.	Protect natural environments and provide for sustainable, dispersed recreational activities and small-scale recreational facilities without significant impact on natural processes.
OVERLAYS			
Land Use Designation – Prospecting	600 ha; approx. 30% of the park (figure 2).	Prospecting area.	Allow suitable prospecting while protecting biodiversity, catchment, geological and cultural values, in accordance with Section 32D of the National Parks Act.
Special Management Area – Research	120 ha; approx. 6% of the park.	Ecological thinning research.	Provide for ecological thinning research as part of vegetation management (section 4.4).
Special Protection Area – Natural Values	4 ha; 0.2% of the park.	Important natural values including threatened flora.	Protect sensitive natural values in specific areas and sites where visitor access needs to be restricted.

TABLE 2 SUMMARY OF RECREATIONAL OPPORTUNITIES

ACTIVITY	MANAGEMENT ZONE	OVERLAYS		
	CONSERVATION AND RECREATION ZONE	LAND USE DESIGNATION PROSPECTING	SPECIAL MANAGEMENT AREA - RESEARCH	SPECIAL PROTECTION AREA – NATURAL VALUES
(percentage of park)	(100%)	(30%)	(6%)	(0.2%)
Bicycle riding (section 6.5)	Y	Y	Y	N
Bird watching	Y	Y	Y	N
Bushwalking	Y	Y	Y	N
Car rallies (section 6.2)	N	N	N	N
Camping ¹ – car-based and designated (limited facilities) (section 6.3)	Y	N	N	N
Camping – dispersed (no facilities)	N	N	N	N
Campfires – solid fuel (section 6.3)	Y ²	N	N	N
Barbecues (section 6.3)	Y ³	N	N	N
Dog walking	N	N	N	N
Education/guided activities	Y	Y	Y	Y
Four Wheel Drive touring (section 6.2)	Y	Y	Y	N
Firewood collection	N	N	N	N
Feeding wildlife	N	N	N	N
Fishing	N	N	N	N
Fossil collection	N	N	N	N
Hang gliding, paragliding	N/A	N/A	N/A	N/A
Horse riding (section 6.6)	Y	Y	Y	N
Hunting	N	N	N	N
Licensed tours	Y	Y	Y	N
Nature photography/painting	Y	Y	Y	N
Orienteering/Rogaining (section 6.7)	Y	Y	N	N
Picnicking ¹	Y	Y	Y	N
Prospecting (section 6.8)	Y	Y	N	N
Rockclimbing/Abseiling	N/A	N/A	N/A	N
Scenic drives/Sightseeing	Y	Y	Y	N
Trail bike riding (section 6.2)	Y	Y	Y	N

Notes: ¹ Use of chainsaws and generators not permitted.

² Permitted in fireplaces provided until replaced with alternative facilities

³ Permitted in a public barbecue provided or a portable commercial appliance as defined under Regulation 25(4)(b) of the National Parks (Park) Regulations 2003.

Key:

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

N Not permitted.

N/A Not applicable.

4 STRATEGIES FOR NATURAL VALUES CONSERVATION

4.1 Landscape

Paddys Ranges State Park lies within the West Central Hills landscape character type, which is characterised by wide belts of low country tending generally north–south, bounded by hills (Leonard & Hammond 1984).

Classed as having moderate scenic quality (DCE 1992), the park’s gently undulating open forests are of scenic interest and are visible from within the park and from several nearby main roads. Walking tracks in the park take visitors through scenic open forests and valleys, and to vantage points giving distant views of surrounding agricultural areas and ranges.

Past activities such as gold mining and timber harvesting have modified the natural landscape considerably, but they add considerable visual interest to some areas of the park (section 5.2). Otherwise there are few visual intrusions in the park, except for the former track network, which has undergone considerable rehabilitation over the past 20 years. Structures on land adjacent to the park can adversely impact on the landscape character of the park if the developments use inappropriate designs or materials or are inappropriately located.

The landscape is an intrinsic element of *Country* for Traditional Owners and is significant for Indigenous communities.

Aims

- Protect the natural and cultural landscapes, particularly places of high scenic quality or traditional or other significance, while allowing natural processes to continue.
- Minimise the visual impact of management, recreation and other activities on the landscape.

Management strategies

- *Minimise visual intrusions into the natural landscape and rehabilitate, remove or ameliorate undesirable existing intrusions, where practicable.*
- *Liaise with the Department of Sustainability and Environment and planning authorities to minimise impacts*

from surrounding areas on views within the park (sections 7.2 and 8.3).

- *Monitor and provide input to management activities by other agencies that could affect landscape values (sections 7.1 and 7.2).*
- *Consider and respect the significance of the landscape to Indigenous communities in planning and implementing management activities (sections 5.1, 6.1 and 8.2).*
- *Minimise the impact of signs, visitor facilities and other park developments on the natural and cultural landscape of the park.*

4.2 Geological features

The geology of the park is dominated by Ordovician sediments, and the landform is characterised as gently undulating sedimentary rises (Schoknecht 1988). No sites of geological significance are known within the park. However, the alluvial sediments around Maryborough were rich in gold and featured prominently in the early gold mining history of Victoria (MFNC 1980).

Soils in the park are red duplex on moderate and gentle slopes and yellow to brown duplex in drainage lines. The shallow stony soils derived from the Ordovician sediments have low nutrient status, and the hard setting surfaces are prone to sheet erosion. The area that includes the park has moderate to high susceptibility to sheet and gully erosion (Schoknecht 1988).

Aims

- Protect areas of geological and geomorphological interest.
- Increase visitor understanding and appreciation of geological features.
- Prevent and control soil erosion.

Management strategies

- *Provide interpretive material highlighting the park’s geological features and gold mining history.*

- *Consider soil erodibility within the park and ensure road and track maintenance (particularly drainage works) minimises erosion.*
- *Monitor erosion sites and, where necessary, undertake appropriate control works in accordance with Parks Victoria's guidelines and in consultation with the North Central Catchment Management Authority (section 4.3).*
- *Encourage research to identify landforms of special significance to the relevant Indigenous communities and protect them from damaging or inappropriate activities (sections 5.1 and 8.2).*
- *Consider and respect the significance of landforms to the Indigenous communities in planning and implementing management activities (sections 4.1, 5.1 and 6.1).*

4.3 Rivers and catchments

The park lies within the Loddon River Catchment, which is under the jurisdiction of the North Central Catchment Management Authority's (NCCMA) area of responsibility.

The Loddon River Catchment has an area of 1.5 million hectares, extending from the Victorian central highlands to the Loddon–Murray Irrigation area in north central Victoria. The catchment has a population of approximately 150 000, 70% of whom live in the urban centres of Bendigo, Swan Hill, Kerang, Daylesford, Castlemaine and Maryborough (NCCMA 2003). Only 15% of the catchment is covered by remnant native vegetation, most of which is on public land set aside for nature conservation, recreation and timber production. The remaining 85% of the catchment has been cleared for agriculture and urban development (NCCMA 2003).

Timor Creek and Whipstick Gully traverse the park near the headwaters of the western part of the catchment and eventually flow into the Loddon River near Dunolly.

The major threats to the catchment include pest plants and animals, agricultural run-off, soil erosion and altered water regimes.

Major erosion gullies in the park have been rehabilitated by the installation of structures or

by soil stabilisation works, and are maintained in consultation with the NCCMA.

Aim

- Protect and enhance creek and catchment values within the park.

Management strategies

- *Ensure that fire management activities do not adversely affect the ecological condition of streams and stream catchments within the park (section 4.6).*
- *Liaise and coordinate pest plant and animal control efforts with adjoining landholders, land managers and the NCCMA (section 4.7).*
- *In cooperation with the NCCMA, undertake erosion control work to improve and protect the natural values of the catchment.*

4.4 Vegetation

Vegetation communities

The Box–Ironbark forests and woodlands of northern Victoria have been severely degraded since European settlement, and only isolated remnants remain (ECC 2001). As a result, the six Ecological Vegetation Classes (EVCs) that occur in the park are of considerable conservation significance.

Box–Ironbark Forest (Western Goldfields) EVC, which is depleted in the Goldfields bioregion, occupies 80% of the park on gently undulating rises and low hills. The overstorey comprises an open cover of eucalypts up to 20 metres tall dominated by Red Box and Grey Box. Red Ironbark, Yellow Gum, Long-leaf Box and Red Stringybark are also present (Muir et al. 1995). The understorey comprises dense shrubs of Slender Rice-flower, Silky Bush-pea, Narrow-leaf Bitter-pea, Hairy Bursaria and Hedge Wattle. Small Matt-rush is a common ground layer species.

Lower Rises Grassy Woodland EVC is endangered in the bioregion and covers about 14% of the park. It occurs on sites with moderate fertility and water availability, such as flood plains or minor creeklines with alluvial deposits and gently undulating terrain with soils derived from Ordovician sediments (Muir et al. 1995). The dominant species in the

overstorey are generally Grey Box and Yellow Gum. The diversity of the ground layer is a distinctive feature and comprises Spear-grass, Common Wheat-grass, Feather Spear-grass, forbs and chenopods.

Alluvial Terraces Herb-rich Woodland and the Creekline Grassy Woodland EVCs collectively cover 1% of the park.

Alluvial Terraces Herb-rich Woodland is considered vulnerable in the bioregion and occurs on the lower slopes, drainage lines and old alluvial plains of gently undulating landscapes. This vegetation class tends to flank the Creekline Grassy Woodland. The overstorey is dominated by Yellow Box and may include Grey Box (frequently codominant) and Yellow Gum. Annual and perennial forbs and grasses dominate the ground layer.

Creekline Grassy Woodland is endangered in the bioregion and fringes the ephemeral drainage lines. The overstorey is dominated by large old River Red Gums, and there is a dense ground cover of grasses and sedges. Occasional shrubs include Wirilda, Black Wattle and Rough-barked Honey-myrtle.

Heathy Dry Forest and Heathy Woodland together cover about 2% of the park and are classified as of least concern in the bioregion. Both EVCs have a characteristic dense understorey dominated by Daphne Heath and Cat's Claw Grevillea.

Heathy Dry Forest (Northern Goldfields) EVC is also classified as of least concern in the bioregion. It occurs upslope of Box–Ironbark Forest, on westerly and northerly aspects and ridgetops of gently undulating terrain and low hills. These areas have shallow soils derived from Ordovician and Lower Devonian sediments with low fertility and poor water-holding capacity. The overstorey is dominated by Red Stringybark and Red Box. Distinctive shrubs include Common Rice Flower, Common Beard-heath, Common Hovea and Blue Finger-flower, and there is a prominent ground cover of Grey Tussock-grass, Silvertop Wallaby-grass, Short-hair Plume-grass, Supple Spear-grass and Variable Sword-sedge.

Heathy Woodlands (Northern Goldfields) is vulnerable in the bioregion and occurs on small patches of sandy or clay soils that are moist in winter and dry in summer. Stunted

trees of Bundy and Grey Box dominate the overstorey, and Common Fringe-myrtle is usually in the understorey.

Draft Conservation Management Objectives (Parks Victoria 2006; Cheers 2006) have been prepared for the long-term management of each of these ecological vegetation classes.

There is insufficient knowledge regarding the natural fire frequency and fire history for each ecological vegetation community within the park. It is not certain whether Box–Ironbark Forest needs fire for recruitment, and the natural fire frequency is thought to be greater than 30–40 years. By contrast, the natural fire frequency in Heathy Dry Forest is estimated to average 20 years. Therefore, inappropriate prescribed burning regimes could impact on the conservation values of the park (section 4.6).

Indigenous people recognise vegetation as an intrinsic element of *Country* and Traditional owners maintain a sophisticated knowledge of its value and uses.

Prior to European settlement, the park's vegetation communities were most likely dominated by large, wide-crowned, hollow-rich and widely spaced trees (ECC 2001). As a result of past land-use, the large trees in the park have been replaced mainly by smaller trees in much higher densities. In many cases, multiple stems have grown on from the initial coppice regrowth generated when the original large trees were first cut. This substantial change in structure and large tree abundance has reduced the habitat diversity of the vegetation (ECC 2001) and has had significant impact on the environmental values of the park.

To meet government objectives following the ECC recommendations, an ecological management strategy was proposed to achieve a parks and reserves system that more closely resembles the pre-European forest and to address broader biodiversity elements including pest plants, pest animals, land degradation and fire. Ecological thinning of Box-Ironbark forests and woodlands was recommended as the major component of this ecological management strategy.

A landscape-scale experiment to examine changes in forest structure, flora and fauna in response to ecological thinning is the major

focus of a research program to support the ecological management strategy. The experiment has been established at four sites in the Box–Ironbark area, including the park (table 1, figure 2). The primary objective of the trial is to investigate whether ecological thinning can be used to achieve a more appropriate balance of juvenile, intermediate and mature trees and increase fauna diversity. The broader application of ecological thinning in other Box–Ironbark areas will be investigated following the conclusion of the trial. Monitoring of forest structure, understorey flora, selected invertebrate groups, arboreal mammals and birds is being undertaken as part of the experiment.

The ecological management strategy will provide opportunities for a broader range of research, including monitoring of threatened species, fire management and selected threats.

Flora

The park supports at least 232 native vascular plant species (DSE 2006b), including nine threatened species — Clover Glycine, Goldfields Grevillea, Slender Stylewort, Rayless Daisy-bush, Slender Mint-bush, Book Trigger Plant, Lowly Greenhood, Brilliant Sun-orchid and Crimson Sun-orchid (appendix 3). Brilliant Sun-orchid, Clover Glycine and Lowly Greenhood are also listed as threatened in Victoria under the Flora and Fauna Guarantee Act (FFG Act) and nationally under the Environment Protection and Biodiversity Conservation Act (EPBC Act).

The park is critical to the protection, conservation and survival of Brilliant Sun-orchid and Lowly Greenhood, which are endemic to Victoria. The distribution of Clover Glycine is not well known in the park, but it is believed to grow in Alluvial Terraces Herb-rich Woodland. The park supports large, hardy populations of Goldfields Grevillea and Slender Mint-bush and is an important site for these species. Book Trigger Plant grows along drainage lines within Alluvial Terraces Herb-rich Woodland and Creekline Grassy Woodland during wet years. Special Protection Area Overlays have been developed to protect threatened flora in the park (table 1, figure 2). There is very little known about the bryophyte, lichen and fungal flora of the park.

A wildfire burnt much of the park in 1985, resulting in an altered vegetation structure and a dense understorey. However, the understorey regrowth has since thinned out through natural processes.

Aims

- Protect indigenous flora and vegetation communities, particularly threatened species.
- Protect and conserve indigenous vegetation communities and, where practical, restore their structure and composition to a more natural state, particularly in significant communities.
- Improve knowledge of significant and poorly known flora and threatening processes to improve management, protection and appreciation.

Management strategies

- *Implement priority actions from approved action statements or recovery plans to address threats to species or communities listed as threatened under the FFG Act or EPBC Act (appendix 3).*
- *Continue ecological thinning trials to investigate the development of a forest and woodland structure with a natural balance of juvenile, mature and old growth trees, consistent with the protection of park values.*
- *Review vegetation management in accordance with the latest research and monitoring findings, consistent with the protection of cultural values and in accordance with the Box–Ironbark Ecological Management Strategy.*
- *Rehabilitate and revegetate disturbed areas and disused tracks with indigenous species in accordance with Parks Victoria’s guidelines.*
- *Encourage surveys and research into threatened and under-studied species (including cryptogamic and fungal flora) and vegetation communities (including their ecological fire requirements) to improve the knowledge and manage the requirements of the flora and vegetation communities in the park.*

- *Encourage research to identify Indigenous knowledge relating to vegetation, flora and harvesting practices.*
- *Reflect Indigenous knowledge of vegetation in management practices as appropriate, and ensure that the significance of vegetation and flora to the Traditional Owners is respected in all management and visitor activities.*
- *Manage visitor activities to minimise impacts on flora and vegetation communities (chapter 6).*

4.5 Fauna

Timber cutting, gold mining and grazing have modified the habitat of the park by changing the structure of the vegetation. The wildfire of 1985 also altered the vegetation structure, which influences habitats in the park (section 4.4). As a result, the number and size of tree hollows suitable as habitat for arboreal mammals is limited. Artificial nesting boxes have been installed in some areas of the park with the assistance of volunteer groups.

Eleven mammal species have been recorded in the park (DSE 2006c). One of these, the Brush-tailed Phascogale, is vulnerable in Victoria and is listed as threatened under the FFG Act (appendix 4).

About 130 bird species have been recorded in the park, including many species which are dependent and associated with the Victorian Temperate-woodland Bird Community listed under the FFG Act (SAC 2001). The Swift Parrot is listed as endangered under the EPBC Act, and the Swift Parrot, Regent Honeyeater, Painted Honeyeater, Powerful Owl, Diamond Firetail, Grey Goshawk and Crested Bellbird are listed as threatened in Victoria under the FFG Act (appendix 4). The Crested Bellbird has been recorded in the park and its habitat is predominantly the shrub layer. The Crested Bellbird is one of many threatened and declining temperate-woodland bird species. The park is critical for its habitat and is likely to support the most southerly population within Australia.

Eleven reptile and five amphibian species have been recorded in the park, including Bibron's Toadlet and Southern Toadlet, which are threatened in Victoria (appendix 4).

Invertebrate populations are important for sustaining the foraging behaviour and patterns of the woodland bird community. It is therefore important to gain some knowledge of invertebrates in the park.

The risk assessment workshop concluded that browsing pressure from wallabies and, to a lesser extent, grazing by kangaroos was having a significant impact on the woodland and Box–Ironbark ecological vegetation communities. These impacts are believed to have been exacerbated by the recent prolonged dry period and drought. The workshop also found that the collection of fallen timber for firewood (section 6.3) was having a negative impact on habitat for birds, particularly the Brown Treecreeper (Raulings 2006).

'Loss of coarse woody debris from Victorian native forests and woodlands' is recognised as a major factor contributing to the loss of biological diversity in Australian woodlands and is listed under Schedule 3 of the FFG Act as a potentially threatening process. In particular, this threatening process is recognised as having a negative impact on the presence of Yellow-footed Antechinus, Speckled Warbler, Hooded Robin, Spotted Quail Thrush, Brown Treecreeper, Red-capped Robin and Scarlet Robin (SAC 2003).

Aims

- Protect indigenous fauna, particularly threatened species.
- Improve knowledge of significant and poorly known fauna and threatening processes to improve management, protection and appreciation.

Management strategies

- *Protect large old trees in the park and maintain and monitor nest boxes.*
- *Implement priority actions from approved action statements or recovery plans to address threats to species or communities listed as threatened under the FFG Act or EPBC Act (appendix 4).*
- *Encourage and support research and surveys on threatened fauna listed in appendix 4 and poorly known fauna to improve knowledge of their requirements.*

- *Investigate and monitor the impacts of wallabies and kangaroos on flora and vegetation communities and undertake mitigation measures in accordance with Parks Victoria's guidelines if required.*
- *Manage visitor activities to minimise impacts on fauna species and habitats (chapter 6).*
- *Enhance fauna habitat by revegetating disturbed areas, maintaining habitat corridors and linking remnant vegetation.*
- *Investigate the role of fire in maintaining fauna habitat.*
- *Where appropriate, encourage research to identify Indigenous knowledge relating to fauna.*
- *Reflect Indigenous knowledge of fauna in management practices as appropriate.*
- *Respect the cultural obligations of Traditional Owners in relation to fauna and their significance in all management and visitor activities.*

4.6 Fire management

The National Parks Act requires the Secretary to DSE to ensure that appropriate and sufficient measures are taken to protect parks from injury by fire. Current fire protection measures are carried out in accordance with the *North West Region Fire Protection Plan, Bendigo Fire District* (DSE 2003b), the *Code of Practice for Fire Management on Public Land* (DSE 2006a) and Parks Victoria's operational policies.

The Code of Practice requires that fire management activities ensure that environmental values, including the vigour and diversity of the State's indigenous flora, are protected, as far as practical, from the harmful effects of wildfire and inappropriate fire regimes.

The Fire Protection Plan is a strategic plan to prevent, prepare for, suppress and recover from wildfire on public land in the Bendigo Fire District, and is implemented through a three-year Fire Operations Plan. These plans take account of:

- protection of life and property
- protection of natural and cultural values

- ecological requirements of specific vegetation communities
- fuel accumulation rates as determined by DSE's 'Overall Fuel Hazard Guide'.

The plan applies the following fuel management zones to the park:

- **Zone 3.** Most areas of the park. This provides for an irregular mosaic of areas of fuel reduction, complementing works in zones 1 and 2 in reducing the severity of wildfires.
- **Zone 2.** A 300 metre wide fuel-reduced strip across the middle of the park along Settling Pond Track and Possum Gully Track that creates a strategic corridor to help prevent wildfire spreading throughout the park.

The majority of the park was burnt by wildfire in 1985. Several fuel reduction burns have been undertaken in recent years in Zone 2.

Fire control activities, including the construction of control lines and the use of phosphate-based fire retardants, may result in the fragmentation, modification or loss of native flora, fauna habitat and cultural sites, places, landscapes and objects.

Fire is an important factor and a powerful management tool in maintaining the vigour and diversity of the park's vegetation.

There is little knowledge about the natural frequency of wildfire in the Ecological Vegetation Classes within the park and the long-term fire history (section 4.4). Too-frequent fires or long periods without fire could change the structure and composition of native vegetation communities and affect the survival of dependent fauna. Fire regimes appropriate to the conservation of the vegetation communities and fauna of the park require further research.

Aims

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

- Identify and implement fire regimes appropriate to the conservation of native species and communities.

Management strategies

- *Implement fire protection works in accordance with the North West Region Fire Protection Plan, Bendigo Fire District (DSE 2003b) and the Code of Practice for Fire Management on Public Land.*
- *In partnership with DSE, work towards the use of prescribed fires to reduce fuel loads in order to protect life and property and meet ecological and cultural requirements, by updating or reviewing fire management plans.*
- *Ensure that the guidelines in the Code of Practice for Fire Management on Public Land are applied in suppressing wildfire in the park, in particular to ensure the protection of known cultural and environmental values.*
- *Encourage research into Indigenous knowledge relating to fire, including its use and management, in cooperation with the relevant Registered Aboriginal Party.*
- *Ensure that the park's natural and cultural heritage, are taken into account in the planning and implementation of fire protection and management operations.*
- *Promote ecological studies on the effects of fire on vegetation and habitat, and exclude fire or conduct ecological burns where appropriate to conserve native species and communities (sections 4.4 and 4.5).*
- *Refine ecological and prescribed burning regimes to reflect latest monitoring and research findings.*
- *Publicise and enforce regulations relating to fires within the park.*
- *Encourage adjoining landowners to undertake complementary fire prevention works on their properties.*

4.7 Pest plants and animals, and diseases

Over 60 pest plant species have been recorded in the park, but infestations are generally

small, confined to disturbed areas and well controlled. The main pest plants are Bridal Creeper, Spear Thistle, Chilean Needlegrass, Blue Periwinkle, Cape Broom, Oxalis, Paterson's Curse, St John's Wort and Sweet Briar. Woodlands are particularly susceptible to invasion by pest plants. Bridal Creeper is the most difficult species to control and is increasing throughout the park. Illegally dumped garden refuse is believed to be a major source of pest plants in the park.

There is no evidence of the presence of Cinnamon Fungus (*Phytophthora cinnamomi*) or other plant pathogens within the park.

Populations of rabbits and hares are controlled and are not high, but these pests reduce the regeneration of vegetation and thereby impact on habitat for native fauna. The European Rabbit is thought to be having a direct effect on the habitat of the Crested Bellbird. Rabbits also disturb the soil by burrowing, which leads to erosion.

Foxes and feral cats are widespread in the park. Although their numbers are low they pose a significant threat because they are predators of a range of native fauna.

Feral populations of the European Honeybee compete with native fauna for tree hollows and have been found in the nest boxes. Honeybees may also compete for nectar and displace native pollinators. 'Threats to native flora and fauna arising from the use by the feral honeybee *Apis mellifera* of nesting hollows and floral resources' is listed as a potentially threatening process under Schedule 3 of the FFG Act (SAC 2002).

Aims

- Control and where possible eradicate pest plants and animals from the park.
- Minimise the impact of control programs on native flora and fauna.
- Restore native vegetation in areas where non-indigenous plants have been removed.

Management strategies

- *Develop and implement an integrated approach to pest plant and animal control in accordance with Parks Victoria's guidelines and the following priorities:*

- *protection of threatened species as identified through the risk assessment*
- *vigorous new or emerging weeds before they become established*
- *vegetation communities at high risk of invasion from pest plants*
- *priority weeds listed under the Catchment and Land Protection Act.*
- *Identify effective methods for controlling and minimising the spread of Bridal Creeper, including biological control.*
- *Restore indigenous vegetation to disturbed areas using local seed, particularly where pest plants have been eradicated.*
- *Destroy feral European Honeybee populations within the park in consultation with the Victorian Apiarists Association.*
- *Liaise and coordinate pest plant and animal control programs with neighbouring landholders and managers, including the North Central Catchment Management Authority.*
- *Use control methods that minimise disturbance to natural systems. Avoid or carefully control soil disturbance and the use of chemicals, especially where this could impact on natural or cultural values.*
- *Ensure all significant pest plant and animal control activities in the park are incorporated into Parks Victoria's Environmental Information System.*
- *Work with the relevant Registered Aboriginal Party to ensure that Aboriginal places and sites are not adversely affected by pest plant or animal management activities.*

5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

5.1 Indigenous cultural heritage

Indigenous tradition indicates that the park is part of the *Country* of the Dja Dja Wurrung.

Aboriginal Affairs Victoria's Register of Sites does not include any Aboriginal sites recorded within the park, although there are sites on nearby Crown land. Only a small area of the park has been surveyed for Indigenous sites, and there may be sites in the park that have not yet been formally recorded.

All Aboriginal cultural heritage, including places, objects and Aboriginal human remains are protected under the Aboriginal Heritage Act (section 2.5). It is an offence to damage, interfere with or endanger an Aboriginal place, object or human remains except in accordance with a Cultural Heritage Management Plan developed with the relevant Registered Aboriginal Party or where there is no Registered Aboriginal Party with the Department of Planning and Community Development (DPCD). Issues relating to the protection of Aboriginal cultural heritage are approached in accordance with this Act.

Issues relating to native title are dealt with according to the Native Title Act (section 2.5). An application for a native title determination by the Dja Dja Wurrung Peoples, which covers Paddys Ranges State Park among other areas, was registered by the Native Title Tribunal on 19 July 2000 (VC00/1). The implementation of the final management plan will take into account the outcomes of this and any subsequent native title applications, and any native title found to exist under the Native Title Act.

The Victorian Native Title Settlement Framework addresses the process for making and implementing agreements with the Traditional Owners (section 2.5).

Aims

- Protect Aboriginal cultural heritage from interference or damaging activities.
- Respect the views of the Traditional Owners in managing the park.

Management strategies

- *Protect and care for all Aboriginal places and objects in partnership with the relevant Registered Aboriginal Party and in cooperation with Aboriginal Affairs Victoria (AAV) (section 8.3), and in accordance with:*
 - *relevant legislation, including the Aboriginal Heritage Act*
 - *Parks Victoria's Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002).*
- *Respect the views of the Traditional Owners and the cultural obligations of Indigenous communities.*
- *Assess annual park programs to minimise the potential for impact of park management activities on Aboriginal cultural heritage, in consultation with the relevant Registered Aboriginal Party (section 8.2).*
- *Maintain confidentiality in respect of Indigenous cultural obligations, knowledge, places, objects and aspirations, in accordance with the wishes of the relevant Registered Aboriginal Party (sections 6.1 and 8.2).*
- *Where appropriate, encourage research into the Indigenous cultural heritage relating to the park, in liaison with the relevant Registered Aboriginal Party and in cooperation with AAV (section 8.2). Use the results of research to target protection and other management activities (sections 4.2 and 4.6).*
- *Assess and identify Indigenous cultural heritage suitable for promotion and interpretation in collaboration with the relevant Registered Aboriginal Party and in liaison with AAV (sections 6.1 and 8.2).*

5.2 Historic heritage

From the 1840s the park was used as a pastoral run and for mining, timber harvesting and eucalyptus oil production.

Gold was discovered at Daisy Hill near Amherst, just south of the park, in 1848. This triggered a flurry of gold mining activity which declined until further gold was discovered in 1852. By 1853, there were over 1000 men operating in the Daisy Hill Goldfield. The huge gold rushes at Maryborough began in 1854 and attracted over 50 000 people from many countries.

In the winter of 1855 there were rushes at the Adelaide Lead to the west of the park and Waterloo Flat in the northern end of the park. The Waterloo area produced hundreds of ounces of gold. Trompfs Reef within the park, at the end of the Waterloo Lead produced a small amount of gold. Federal Reef, along the southern boundary of the park, produced 5000 ounces of gold.

Eight historic alluvial and quartz mining sites have been identified in the park, including dams, puddlers, shafts, batteries and mullock heaps associated with the Waterloo Lead and the Main Lead alluvial workings.

A major problem during the gold mining era was a shortage of water during much of the year. The water race from the modern-day picnic area to the Goldfields Reservoir was constructed in 1878 to supply water to Maryborough.

Over the years, local native hardwoods, particularly Ironbark and Grey Box, provided timber for construction and mine supports, posts and firewood. The growth of Bendigo and the construction of the Maryborough to Clunes railway towards the end of the 19th century placed further demands on timber production from the area.

In 1901, the Minister for Lands engaged many unemployed people to thin the forests around Maryborough, and a rotation policy of forestry work was adopted to enhance future timber production. By 1925 the Minister of Forests and Forestry Commissioners reported that the forests around Maryborough had been transformed into a model forest.

In 1926 Councillor Arch Mason of the Shire of Tullaroop spoke of the necessity to preserve the flora and fauna of Paddys Ranges. Further lobbying and support from adjoining communities resulted in 1700 acres (688 ha) of the Paddys Ranges being set aside in 1930 as a national reserve for the protection of native

flora and fauna. However, logging continued in the reserve and was gradually phased out between 1957 and 1989, when the park was declared.

Between 1870 and the 1930s there were 35 eucalyptus oil distilleries operating around Maryborough. One of the main distilleries in the park was Hamiltons at Reserve Dam, which operated from World War I to the 1930s. The ruins of several huts remain.

Places of historic and cultural significance are managed in accordance with the Burra Charter of Australia ICOMOS (Australia ICOMOS 1999) and the provisions of the *Heritage Act 1995* (Vic.).

Aims

- Conserve and protect places and values of historic and cultural significance.
- Provide opportunities for people to learn about and understand the heritage values of the park.

Management strategies

- *Provide opportunities for research into social history, technological change, past land uses and their impact on the environment or significance of particular heritage places and values.*
- *Continue to survey, identify and record other sites of cultural significance in the park.*
- *Document the heritage values of the park and record the information in Parks Victoria's information systems and ensure that Heritage Victoria is informed of all known and new archaeological sites so that they may be included on the Victorian Heritage Inventory.*
- *Assess the extent of threats to significant heritage places and develop a maintenance and threat remediation program.*
- *Following the threat assessment, determine if a Heritage Action Plan is required for the heritage places, and plan and implement conservation works to stabilise and/or maintain their significance.*

- *Provide visitor information, interpretation and education relating to the park's post-settlement cultural heritage values (section 6.1).*

6 STRATEGIES FOR VISITORS

6.1 Information, interpretation and education

Providing information, interpretation and education helps orientate and inform visitors, foster an understanding and appreciation of the park's special natural and cultural values, build understanding of management activities and help visitors to experience, understand and appreciate the park in a safe and appropriate manner. Parks Victoria delivers information, interpretation and education to visitors by various means, including its website, ranger patrols, Park Notes, signage, tourism brochures and other publications, displays, and licensed tour operators. These services may be developed and provided in collaboration with other agencies.

Although many of Victoria's parks and reserves play an integral role in the delivery of nature-based tourism, the Box–Ironbark parks are unlikely to become key destinations in their own right. However, Paddys Ranges State Park can complement existing regional tourism destinations.

The *Goldfields Regional Tourism Development Plan 2004–2007* (Tourism Victoria 2003) outlines the strategic directions for the Goldfields Region. Nature-based visitors account for approximately 20% of all visitors to the region. The plan recognises that the promotion of the park in local towns and the provision of heritage trails are elements of a key strategy to support tourism in the Goldfields.

There are opportunities to develop themes related to the Western Goldfields and education and interpretation of the park's unique flora and fauna, Indigenous and post-settlement cultural heritage and the environmental management of the Box–Ironbark forest and woodland.

Current interpretive material includes information shelters at the picnic area and camping area. The information in the shelters aims to help orientate visitors and provide other general information about the park and its attractions.

Park staff, tour operators and community groups currently deliver interpretive programs relating to the park's natural and cultural values.

Aims

- Promote and encourage visitors' discovery, enjoyment and appreciation of the park's natural and cultural values in a safe and appropriate manner through information, interpretation and education.
- Orient visitors in relation to the park and its natural and cultural features, focusing on information and interpretation in neighbouring towns.

Management strategies

- *Provide and support high-quality opportunities for visitors to discover, experience and understand the park's natural and cultural values. Target visitors across the range of user groups through a variety of tourism, information, interpretive and education media.*
- *Deliver messages about the following values and themes:*
 - *natural values including the management of the Box–Ironbark forest and woodland*
 - *post-settlement cultural heritage including gold mining history*
 - *Indigenous cultural heritage*
 - *appropriate behaviour, including minimal impact techniques and adherence to codes of conduct appropriate to their activity to protect park values and maximise visitor safety.*
- *Deliver information, interpretation and education programs in conjunction with the Maryborough Tourist Information Centre and liaise with state and regional tourism authorities to ensure the park is promoted in regional tourism strategies.*
- *Develop stimulating and innovative approaches to the presentation of the area's values by improving interpretation*

of the natural and cultural values of the park, particularly along the walking tracks, so as to enhance visitors' experience.

- *Promote greater public understanding and appreciation of and respect for Indigenous culture by incorporating information about Indigenous cultural heritage, places and objects in information, interpretation and education programs in collaboration with the Traditional Owners (sections 5.1 and 8.2).*
- *Provide appropriate opportunities and encourage and support Indigenous communities to participate in the interpretation of Indigenous cultural heritage relating to the park with the agreement of the relevant Registered Aboriginal Party (section 8.2).*
- *Continue to allow sustainable educational use by school and community groups. Ensure school and formal interpretative groups adopt the minimal impact guidelines.*
- *Provide visitors with face-to-face interpretation of park values by rangers as appropriate.*
- *Regularly evaluate information and interpretive programs related to the park.*

6.2 Vehicle access

There is good access by road to Paddys Ranges State Park for visitors coming from Maryborough or touring the Western Goldfields. The park can be reached from the Pyrenees Highway and Ballarat–Maryborough Road, and is within three km of Maryborough. Approximately 35 km of formal vehicle tracks traverse the park (figure 3). Visitor use is concentrated on the tracks that lead to the picnic and camping area.

A network of internal vehicle tracks, mostly formed before the park was created, provides access throughout the park. Many informal tracks are being closed and rehabilitated progressively because of soil erosion problems. Several roads in the park are managed by public agencies (table 3).

Karri Track has been upgraded and drained to enable access to the camping area for caravans.

Tracks may be closed temporarily, in the interests of public safety and to minimise damage to tracks. Waterloo Flat Track is closed seasonally to minimise damage to the track surface.

Off-road vehicle use threatens the conservation values of the park and is not permitted.

Aim

- Provide and maintain a safe and sustainable network of vehicle tracks appropriate for visitor use and management, while minimising the impact on the park's natural and cultural values.

Management strategies

- *Maintain vehicle roads and tracks in accordance with table 3 and figure 3.*
- *Liaise with Central Goldfields Shire Council to ensure that the maintenance of vehicle tracks in the park under their control is compatible with the protection of park values (table 3).*
- *Support and promote the scenic driving trails (in appropriate touring information material) in consultation with Central Goldfields Shire Council.*
- *Encourage trail-bike riders to adopt minimal impact guidelines outlined in the Trail Bike Riding Code (DSE 2003d).*
- *Rehabilitate poorly sited and eroded vehicle tracks in consultation with the Central Goldfields Shire Council and adjacent landholders.*
- *Close and rehabilitate informal vehicle tracks, giving priority to those in areas of high conservation significance.*
- *Implement temporary track closures as required to protect public safety and protect natural values.*
- *Control illegal off-road use of vehicles by patrol, enforcement and public education.*
- *Signpost tracks in accordance with table 3.*

TABLE 3 MANAGEMENT OF VEHICLE ACCESS

ROAD / TRACK	CURRENT CLASSIF'N	PLANNED CLASSIF'N	MOTOR VEHICLE USE	OTHER PLANNED USES	ACTIONS/ COMMENTS
MANAGED BY VICROADS					
Pyrenees Highway	5A		M2	C, H, W	Major road between townships.
Ballarat–Maryborough Road	5A		M2	C, H, W	Major road between townships.
MANAGED BY CENTRAL GOLDFIELDS SHIRE					
Martins Road	5B		M2	C, H, W	Road for park and other access.
Old Avoca Road	5A		M2	C, H, W	Major road between townships.
Possum Gully Road	5A		M2	C, H, W	Major road between townships.
MANAGED BY DSE					
Hemlock Track	5D		M2	C, H, W	Road for park and forest access.
Wattle Track	5D		M2	C, H, W	Road for park and forest access.
MANAGED BY PARKS VICTORIA					
Bartlett Track	5C	5C	M2	C, H, W	Road for park and other access. No change. Provides access to private property.
Bennetts Break Track	5D	5D	M2	C, H, W	Road for park and other access. No change.
Box Flat Track	5D	5D	M2	C, H, W	Road for visitor or management access. Formerly known as 'Unnamed 2 Track (Hemlock Track – Possum Gully Road)'. No change.
Daisy Hill Track	5D	5C	M2	C, H, W	Road for park and other access. Improve surfacing.
Dellarbreak Track	5E	5E	M4	C, H, W	Road for park and other access. Provides access to private property. No change.
Emu Break Track	5D	5D	M2	C, H, W	Road for visitor or management access. No change.
Firebreak Track	5E	5E	M4	C, H, W	Road for visitor or management access. No change.
Karri Track	5C	5C	M2	C, H, W	Road for visitor or management access. No change.
Lock Wood Track	5D	5C	M2	C, H, W	Road for visitor or management access. Improve surfacing.
Paddys Ranges Track	5C	5C	M2	C, H, W	Road for visitor or management access. No change.
Pieman Track	5D	5D	M2	C, H, W	Road for visitor or management access. Formerly known as 'Unnamed 3 Track (Hemlock Track – Possum Gully Road)'. No change.

Table 3 contd.

ROAD / TRACK	CURRENT CLASSIF'N	PLANNED CLASSIF'N	MOTOR VEHICLE USE	OTHER PLANNED USES	ACTIONS/ COMMENTS
Possum Gully Track	5C	5C	M2	C, H, W	Road for visitor or management access. No change.
Reserve Track	5D	5C	M2	C, H, W	Road for park and other access. Improve surfacing.
Settling Ponds Road	5C	5C	M2	C, H, W	Road for park and other access. No change.
Dillon Track	5D	5D	M2	C, H, W	Road for park and other access. Formerly known as 'Unnamed 4 Track (Possum Gully Road – Box Flat Track)'. No change.
Waterloo Flat Track	5D	5D	M2	C, H, W	Road for park and other access. Part is subject to seasonal road closure. Provides access to a private property. No change.
Wattle Break	5D	5D	M2	C, H, W	Road for park and other access. No change.
Whipstick Track	5D	5D	M2	C, H, W	Road for visitor or management access. No change.

Key:

Parks Victoria Road classification:

- 5A Primary Road—all weather, two-laned, mainly sealed road.
- 5B Secondary Road—all weather, two-laned formed and gravelled, or single lane sealed with gravel shoulders.
- 5C Minor Road—single lane unsealed, formed road usually lightly gravelled.
- 5D Access Track—single lane, dry weather formed (from natural materials).
- 5E Rough Track—Single lane, unformed earth track at or near the natural surface.

Motor vehicle use:

- M2 Visitors in 2WD and 4WD motor vehicles
- M4 Visitors in 4WD motor vehicles

Other planned uses:

- C Cycling (including mountain bike riding)
- H Horse riding
- W Walking

6.3 Visitor activities and camping

Paddys Ranges State Park offers a diverse range of nature-based recreational opportunities for walking, picnicking, camping, birdwatching, nature study, scenic driving, prospecting, horse riding and cycling.

Prospecting is confined to designated areas to minimise conflicts between park users and conservation values (sections 3.2 and 6.8, figure 2). Horse riding and cycling are confined to vehicle roads and tracks to minimise impacts on park values (sections 6.5 and 6.6).

The park attracts up to 8000 visitors annually and is visited and enjoyed by many of the local residents from the nearby townships of Maryborough, Talbot and Avoca.

The nearest Tourist Information Centre at Maryborough receives approximately 65 000 visitors annually. Maryborough is serviced by hotels, motels, caravan parks, and bed and breakfast accommodation.

The picnic area and camping area in the park are popular with visitors. The facilities include picnic tables, fireplaces, toilets, park information and walking tracks. The camping area has space for up to 16 campsites.

TABLE 4 EXISTING AND PLANNED VISITOR FACILITIES

SITE	LOS	TOILET	TOILET FOR DISABLED	PICNIC TABLE	FIREPLACE OR BBQ	WATER SUPPLY	PARK INFO	LOOK-OUT	CAR PARK
Picnic Area	Mid	E	E	E	R	–	E	–	E
Camping Area	Mid	E	–	E	R	–	E	–	E

Key:

LOS Level of Service:
Mid Moderate levels of visitor facilities and amenities provided

Facilities:
E existing facility
R replace facility
– no facility

In the past, fallen timber has been collected by visitors for use in the fireplaces at the picnic area and camping area. Because the collection of timber has an adverse effect on fauna habitat (section 4.5), firewood collection will no longer be permitted in the park. Existing fireplaces will be replaced with communal gas barbecues and/or suitable alternative barbecue facilities that will not depend on firewood collection within the park.

Until alternative facilities are provided, fires will continue to be permitted in the fireplaces provided, except on days of total fire ban.

Visitors are advised to bring their own drinking water as no potable drinking water is supplied in the park (section 6.10).

Aim

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

Management strategies

- *Provide and maintain visitor facilities in accordance with table 4 and figure 3. Regularly evaluate the condition of the picnic area to ensure visitor experiences and natural values are not compromised.*
- *Continue to promote the ‘take your rubbish home’ policy.*
- *Replace the current fireplaces with communal gas barbecues and/or investigate and provide suitable alternative barbecue facilities to replace*

the existing fireplaces at the picnic area and camping area.

- *Encourage and permit the use of commercial appliances such as portable gas barbecues as an alternative to solid fuel fires.*

6.4 Bushwalking

A network of about 8.5 km of popular walking tracks links the picnic and camping areas, traversing a diverse range of features including significant vegetation communities, cultural areas and places of scenic interest.

Approximately 400 metres of the walking track from the picnic area is well surfaced and is suitable for assisted access for people with moderate disabilities. Visitor information plaques along the walking tracks provide information on the cultural and conservation values of the park.

Aim

- Provide a sustainable network of high-quality walking tracks to enhance visitors’ enjoyment of the park and promote health and well-being in the community, while minimising impacts on park values.

Management strategies

- *Encourage walking on designated walking tracks and vehicle tracks in the park as shown on figure 3 and listed in tables 3 and 5.*

TABLE 5 MANAGEMENT OF WALKING TRACKS

ROAD / TRACK	LENGTH (KM)	PLANNED GRADE	OTHER USES	ACTIONS/COMMENTS
Disabled Access Walk	0.4	2	–	Suitable for visitors with reduced mobility.
Paddys Ranges Walking Track	8.1	3	–	Comprises four loops and links the camping area with the picnic area.

Key:

Australian Standards Classification for walking tracks, AS 2156.1—2001:

Grade 2 For a large number of visitors to walk easily in a natural environment with frequent encounters and a moderate to high level of interpretation and facilities.

Grade 3 For visitors to walk in slightly disturbed natural environments, requiring moderate levels of fitness with occasional encounters and perhaps signage—interpretation and facilities are not common.

- *Provide clear signposting to encourage walkers to stay on designated tracks to reduce off-track impacts and to protect walkers from potential risks (section 6.10).*
- *Continue to work with the Central Goldfields Walking Group and Central Victoria Health Alliance to link the Paddys Ranges walking tracks with adjoining public land and the township of Maryborough.*
- *Liaise with Bushwalking Victoria, Central Goldfields Shire Council and Maryborough Tourist Information Centre to promote walking in the park and adjoining areas.*
- *Promote Bushwalking Victoria's 'Tread Softly' campaign, minimal impacts and bushwalking ethics.*
- *Maintain a sustainable network of existing walking tracks to standards in accordance with table 5.*
- *Provide information to the public on the location and description of walks within the park.*

6.5 Cycling

Recreational cycling, particularly mountain bike riding, has increased in popularity over the past decade as a means of enabling people to explore and enjoy natural areas.

Cycling is permitted on all formed roads and vehicle tracks within the park. Cycling is not

permitted on the walking tracks to minimise both environmental impacts and conflicts with pedestrians and bushwalking.

It is anticipated that cycling may increase in popularity with the proposal to promote and link cycling routes with adjoining Box–Ironbark forest areas (DSE 2003a).

Cycling, particularly if undertaken off-road, can impact on natural and cultural values of the park and therefore needs to be controlled.

The 'Mountain Bike Code' (DSE 2003c) sets out guidelines for safe cycling and methods to minimise impacts of cycling on park values.

Aim

- Provide opportunities for cycling while protecting park values and minimising conflicts with other park visitors.

Management strategies

- *Permit cycling on all roads and vehicle tracks open to the public as shown in table 3, but not on walking tracks in the park.*
- *Liaise with DSE, Central Goldfields Shire Council, Mountain Bike Australia (MTBA), local cycling and mountain bike riding clubs and the Traditional Owners to develop a coordinated regional approach to link and promote cycling routes with adjoining areas.*

- *Encourage cyclists and mountain bike riders to adopt minimal impact practices outlined in the 'Mountain Bike Code' (DSE 2003c).*

6.6 Horse riding

Horse riders use the park regularly, although not in large numbers. They are permitted on all open roads and vehicle tracks in the park as shown in figure 3 and table 3.

Horse riding, particularly in groups, can conflict with other visitor activities and result in damage to tracks, accelerated soil erosion and the introduction of weeds (sections 4.2 and 4.7). To reduce the potential impact of horses, camping with horses is not permitted within the park.

Horse riding and camping with horses is permitted in State forest adjoining the park.

Aim

- Provide opportunities for recreational horse riding consistent with the protection of park values and other visitor activities.

Management strategies

- *Permit horse riding on all roads and tracks open to the public as shown in table 3, except walking tracks.*
- *Prohibit overnight camping with horses in the park.*
- *Monitor the impact of horse riding in the park. Where necessary, restrict access to tracks to protect park values.*
- *Encourage horse riders to adopt minimal impact practices and encourage adherences to the 'Horse Riders Code of Conduct' (DSE 2003e).*
- *Liaise with local horse riders and horse riding groups to remove horse droppings from the park and to ensure that only weed-free stock feed is brought into the park.*
- *Encourage local horse riders and horse riding groups to notify the Ranger in Charge of proposed day trail rides involving more than 10 horses.*

6.7 Orienteering and rogaining

A rogaining event was held in the park in 2000, but orienteering is not known to have occurred in the park. The dense understorey following the 1985 wildfire had made the park unsuitable for these events previously.

However, as the understorey vegetation has thinned out with time, it is possible that the park could attract more of these events in the future.

Orienteering and rogaining events have the potential to trample vegetation and impact on the natural and cultural values of the park. Historic sites associated with the landscape can pose a safety risk to participants and event organisers need to be made aware of these hazards.

Orienteering and rogaining may be permitted in the park except within the Special Protection Area and Special Management Area. Events will be subject to a permit, and seasonal restrictions and special conditions may apply to minimise impact on the natural or cultural values.

Aim

- Permit orienteering and rogaining while minimising the impact on park values.

Management strategies

- *Allow orienteering and rogaining in accordance with table 2 and figure 2, and subject to a permit and conditions that minimise the impact on park values.*
- *Work with event organisers or representative organisations to identify and protect sensitive values or features in proposed event areas.*

6.8 Prospecting

In Victoria, prospecting is controlled primarily under the provisions of the *Mineral Resources (Sustainable Development) Act 1990* (Vic.), which requires that prospectors hold a Miner's Right or Tourist Fossicking Authority (TFA).

Prospecting provides a strong link to the park's association with the history of gold discovery (section 5.2).

Parks Victoria seeks to manage prospecting in cooperation with prospecting clubs and

organisations in a manner that protects the natural and cultural features of the park.

Prospecting is permitted in 30% of the park, within the designated areas for prospecting (figure 2) in accordance with section 32D of the National Parks Act under a Miner's Right or a TFA. Only non-mechanical handtools, which may include a pick, shovel, panning dish, portable cradle and metal detector, are permitted for prospecting, and holes dug must be backfilled on the same day.

Prospecting is not permitted in the remaining areas of the park to protect vulnerable and cultural values from disturbance and to minimise conflicts with other park visitors. Prospecting is also excluded from the road and track network of the park to minimise impacts on park assets and for reasons of public safety. Prospectors are not permitted to disturb historic or cultural objects or relics, which are protected under State and Commonwealth legislation (sections 5.1 and 5.2).

Parks Victoria, the Prospectors and Miners Association of Victoria (PMAV), Department of Primary Industries (DPI), DSE and the Victorian Gem Clubs Association (VGCA) have developed a Prospectors Guide (DPI 2004), which sets out guidelines for prospecting and methods to minimise the impacts of prospecting on park values.

Aim

- Provide opportunities for prospecting in the park while protecting park values and minimising conflict with other visitors.

Management strategies

- *Permit prospecting within the areas covered by the Land Use Designation – Prospecting Overlay, excluding roads and tracks (figure 2), subject to prospectors holding a current Miners Right or operating under a Tourist Fossicking Authority.*
- *Monitor the impacts of prospecting on cultural and natural values of the park.*
- *Develop and implement solutions to address existing or potential adverse effects or impacts of prospecting identified through monitoring, in consultation with*

the PMAV and other relevant stakeholder groups.

- *Work cooperatively with the PMAV to encourage prospectors to adhere to the 'Prospectors and Miners Code'.*
- *Include information about the prospecting areas in the park on park information (section 6.1).*

6.9 Tourism services

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

Five licensed tour operators currently undertake activities within the park, including bushwalking, prospecting, four-wheel-drive touring and bus tours. The park provides opportunities for additional nature-based and educational tourism activities in association with visits to the Central Goldfields and township of Maryborough.

Adventure Activity Standards and Minimal Impact Guidelines have been developed by Sport and Recreation Victoria, Department of Sustainability and Environment, Parks Victoria and Tourism Victoria to guide tour operators using the park (ORC 2006).

Aim

- Provide opportunities for and encourage provision for external tourism services while minimising impacts on natural and cultural values of the park.

Management strategies

- *Encourage licensed tour operators to develop and deliver guided tours that enhance the park experience of visitors (sections 6.1 and 8.2).*
- *Encourage licensed Indigenous tour operators to add to the tourism experience in the park by developing and delivering interpretive and educational tours on Indigenous culture and history.*
- *Continue to liaise with licensed tour operators and the tourism industry to facilitate the delivery of appropriate messages relating to park values and their*

protection and to minimise potential impacts on park values and other park users.

6.10 Public safety

Potential hazards and risks to visitors in the park include falling tree limbs, old mine shafts and workings, extremes in weather conditions and wildfire during periods of high fire danger.

Visitors need to be aware of safety risks and take responsibility for the activities they plan and pursue to ensure that they enjoy a safe visit. Public information and education programs are among the most effective ways to promote safety (section 6.1). Safety messages are presented to visitors through signs, Park Notes and ranger patrols.

Motorists, cyclists, horse riders and walkers share roads and tracks throughout the park. Vehicles travelling at excessive speeds along internal tracks pose a safety risk to other track users.

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

Relevant agencies respond to incidents within the park in accordance with the Central Goldfields Municipal Emergency Response Plan. Parks Victoria's response to emergency incidents during normal operating activities within the park is guided by the *Western Goldfields Emergency Management Plan* (Parks Victoria 2007).

An Emergency Management Plan and a fire protection plan (section 4.6) have been developed.

Drinking water is not supplied or available to visitors in the park (section 6.3).

Aims

- Promote visitor safety and awareness of safety issues and risks within the park associated with access and use.
- Promote and observe safe practices, and cooperate with emergency services.

Management strategies

- *Increase visitors' awareness of safety issues and potential hazards in the park through the use of Park Notes, Parks Victoria's website and information signs.*
- *Provide and maintain safety and information signage at key locations in the park (section 6.1).*
- *Update the Emergency Management Plan for the park, and ensure staff, licensed tour operators and authorised park users (e.g. beekeepers) are aware of the plan.*
- *Regulate access to old mining sites and other sites identified as having potential risks to public safety.*
- *Cooperate with and support responsible agencies in emergency response and ensure that Parks Victoria staff have adequate levels of training in emergency procedures.*
- *Liaise with the Central Goldfields Shire Council to ensure that the Municipal Emergency Response Plan makes adequate provision for likely incidents in the park.*
- *Audit identified risks and hazards within the park regularly and undertake works to minimise risks to visitors.*

7 STRATEGIES FOR AUTHORISED AND ADJACENT USES

7.1 Occupancies and occasional uses

A number of uses and activities may be permitted in the park, subject to specified conditions to minimise impacts.

Apiculture

There are five apiculture sites within the park for which temporary apiculture permits are issued for six month periods under Section 21 of the National Parks Act.

Park managers need to consider apiculturists' needs when planning road closures, fire suppression, prescribed burning and ecological thinning, which may affect flowering of vegetation, and give appropriate notification to apiculturists' if their activities could be affected.

Public utilities

Consents have been granted under Section 27 of the National Parks Act for an underground water pipeline, powerlines and telecommunication cables that traverse the park to service two freehold allotments enclosed within the park.

Private property access

Two road easements that provide access to four freehold allotments enclosed by the park have not been constructed and support remnant vegetation. Consequently, access to these allotments follows existing tracks within the park. An agreement to use park tracks as access has been granted to one of the landowners. Access agreements with the other landowners will be formalised when the remaining three lots are developed.

Occasional uses

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

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

natural and cultural values of the planning area. This is achieved through a permit system for all filming and photography conducted as part of a trade or a business. Amateur photographers or people taking photographs or videos for personal or hobby interest do not require a permit.

Adventure training and field navigation exercises by Defence Force units may be undertaken subject to a permit outlining conditions to ensure minimal impacts on the park. Defence Force training activities have not occurred within Paddys Ranges State Park.

Aim

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

Management strategies

- *Ensure all existing and future public authority installations and services are subject to consent under Section 27 of the National Parks Act, including conditions to ensure that construction, operation and maintenance are consistent with the protection of park values and the amenity of visitors.*
- *Continue to allow five apiculture sites in accordance with the government-accepted ECC recommendations and Parks Victoria's operational policies.*
- *Should apiary sites require relocation, locate the new sites in consultation with the Victorian Apiarists Association (VAA) and relevant apiarists.*
- *Ensure that all occupancies are appropriately licensed or permitted and are used and operated in a manner that does not conflict with park values.*
- *Monitor authorised activities to ensure that conditions of authorisations are met. Assess the effectiveness of conditions of authorisations in protecting the park, and seek a review of authorisations if necessary to arrest impacts.*

- *Permit Defence Force training or field navigation exercises in the park in accordance with Parks Victoria's operational policies and relevant permit conditions.*
- *Permit events and functions that:*
 - *have acceptable environmental impacts*
 - *do not damage cultural values of the park*
 - *do not unduly disturb and 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 park values.*
- *Manage commercial filming and photography in accordance with Parks Victoria's operational policies.*
- *Ensure relevant Indigenous communities are consulted and involved in the planning and participation of relevant events.*

7.2 Park boundaries and adjacent uses

Agricultural land borders two thirds of the park boundary. Uses on this land include grazing, poultry farming and rural-residential use. There are also three areas of freehold land enclosed by the park. Threats to the park's natural values from adjacent land include weed invasion and interference with and predation of native fauna by domestic animals.

The remaining third of the park perimeter abuts forested areas, including Maryborough Regional Park to the north-east, Daisy Hill State Forest to the south and Wareek State Forest to the west and south-west. Maryborough Regional Park is managed by Parks Victoria. Management of the State forest is guided by the *Bendigo Forest Management Plan* (DSE 2006d).

Land use and development in the park and on land surrounding the park is regulated by the Central Goldfields Shire Council through the local planning scheme. Freehold land

bordering the park is designated Rural Living Zone (RLZ) and Rural Conservation Zone (RCZ). Most of these areas are covered by the Salinity Management Overlay (SMO) and partly by an Erosion Management Overlay (EMO) and Land Subject to Inundation Overlay (LSIO). The park, the adjoining State forest and Maryborough Regional Park are designated as Public Conservation and Resource Zone (PCRZ). Before deciding on an application to use or develop land within these zones, the Central Goldfields Shire Council must consider the likely environmental impacts of the proposal.

DSE's bioregional action planning for the Goldfields bioregion (NRE 2002a) encourages the complementary management of private and public land surrounding the park that is important for biodiversity conservation.

Park neighbours

Parks Victoria and neighbouring land managers have a range of land management issues in common, particularly conservation, the management of pest plant and animals, and erosion control. The North Central Catchment Management Authority (NCCMA) generally encourages and coordinates the implementation of conservation projects on neighbouring freehold land (section 8.3).

Conservation activities on lands abutting the park are likely to enhance conservation outcomes for the park. This can be achieved through Parks Victoria and NCCMA continuing to develop and strengthen their partnership or cooperating with neighbours in implementing conservation projects that span the park boundary.

Parks Victoria has also previously liaised with neighbours to resolve minor boundary encroachments and other shared management issues.

Various Good Neighbour programs have operated in and around the park for a number of years and these programs are likely to continue.

Aims

- Cooperate with adjoining landholders and the Central Goldfields Shire Council to manage boundary and adjacent land use issues.

- Increase awareness and support for the park and maintain good relations with neighbours.

Management strategies

- *Encourage application of the Good Neighbour Policy to manage issues and implement programs on or near the boundary of the park, and encourage landholders to participate in schemes such as Land for Wildlife and Landcare.*
- *With the support of the park's neighbours, progressively implement a program to remove intrusions and repair impacts from boundary encroachments through*

community education, letters, site visits, surveys and follow-up inspections, where necessary.

- *Cooperate with adjoining landholders in coordinating fire and pest control programs.*
- *Encourage sound conservation and land management practices on private land adjoining the park, in collaboration with the NCCMA (section 8.3).*

8 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

8.1 Community awareness

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

Education and interpretation programs (section 6.1) play an important role in raising the awareness of the park in the wider community. Parks Victoria aims to communicate the benefits of a healthy parks system and its contribution to the health of individuals and society through the 'Healthy Parks Healthy People' program.

Parks Victoria supports the promotion of the park, and its safe, responsible and sustainable recreational use, in collaboration with local government, Maryborough Visitor Information Centre, community groups and educational institutions (sections 6.1, 8.2 and 8.3).

Active information, interpretation and schools education programs are carried out in the park (section 6.1).

Aims

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

Management strategies

- *Build broader community awareness of the opportunities to make a difference to the park's management through taking shared responsibility and becoming directly involved.*

- *Increase public awareness and understanding of significant park management activities, including fire management and fuel reduction burning, pest plant and animal control, ecological thinning trials and the conservation of threatened species by participating in community activities, including local events, and face to face interpretive activities (section 6.1).*
- *Promote information on park features, values and management activities to the local community in the local media.*
- *Communicate the work of Friends, volunteers and community groups to the broader community.*

8.2 Community participation

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

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

The Friends of Paddys Ranges, a range of other volunteer groups, adjoining landholders and the North Central CMA have been involved in numerous projects that have provided positive contributions to the protection and enhancement of park values. A number of key community members have collected substantial flora and fauna information over a number of years.

The Traditional Owners have considerable interest in and aspirations for the park as part of *Country* and are an important potential source of knowledge about the area that has yet to be documented. A strong working relationship with the relevant Registered Aboriginal Party will be essential for reflecting Traditional Owner views in the park's

planning and management and reconciliation of their interests and aspirations with those of other members of the community.

Developing partnership approaches to the impacts arising from fragmentation, with the community and other land management agencies will benefit the park, particularly revegetation programs that address connectivity within the landscape and landscape-scale threat abatement from weeds and feral pests.

Aim

- Support and encourage the whole community, including volunteers, to actively assist in the park's management by participating and contributing their knowledge and skills.

Management strategies

- *Seek to establish, maintain and strengthen relationships with Friends and volunteers and other community groups that use or have a particular interest in the park.*
- *Encourage and support such groups to work together with each other Parks Victoria and the relevant Registered Aboriginal Party to achieve shared goals for the park.*
- *Work to establish, strengthen and maintain relationships with relevant Indigenous communities. In particular, seek to further develop a close inclusive working partnership with the relevant Registered Aboriginal Party in managing the park.*
- *Liaise and cooperate as appropriate with the relevant Indigenous communities in dealing with Indigenous cultural issues that relate to the park.*
- *Strengthen relationships with community groups that use or have a particular interest in the park and encourage and support them to work together and with Parks Victoria to achieve shared goals for the park.*
- *Ensure that Friends and community groups participating in the park's management have sustainable and rewarding volunteer experiences.*

- *Promote opportunities for community groups to assist Parks Victoria in the park's management.*
- *Promote the activities of the Friends of Paddys Ranges and support them in assisting the park's management.*
- *Encourage community involvement in monitoring and recording programs using standard methods.*
- *Maintain liaison with Friends, volunteers and community groups that participate in the park's management to provide guidance and support and to ensure they have opportunities to appropriately exercise their interests and utilise their knowledge and skills.*
- *Promote opportunities among interested community groups and Parks Victoria's staff for sharing knowledge and increasing understanding and appreciation of each other's aspirations and goals for the park.*
- *Support capacity-building initiatives through appropriate training, tools and assistance that better enable volunteer participation in the planning, use and care of parks.*
- *Encourage and support Friends and other interest groups and volunteers to develop an understanding and appreciation of the park's values and the rich and diverse Indigenous knowledge.*
- *Encourage and support groups that use or have an interest in the park to work together to pursue sources of funding, including Parks Victoria grants, for projects in the park. Encourage joint grants with other groups as appropriate.*
- *Provide opportunities for, and encourage and support, tertiary students to undertake volunteer work experience and research activities that assist park management and are consistent with the plan.*

8.3 Agency partnerships

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

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

The Department of Sustainability and Environment (DSE) establishes parks and provides strategic direction and policy advice for their management, including flora and fauna values and threatening processes. DSE also coordinates and administers the 'Good Neighbour' program (section 7.2).

Parks Victoria acts as a support agency under the direction of DSE for emergency responses, including fire management (section 4.6).

Heritage Victoria (DSE) is the central government agency that provides information and advice about places listed on the Victorian Heritage Register and Archaeological Inventory. It supports the Heritage Council through research, recommends additions to the Register and issues permits for alterations to heritage places.

North Central Catchment Management Authority is responsible for coordinating natural resource management in the north central region in partnership with the community, State government agencies, water authorities, local government and others. The North Central Regional Catchment Strategy provides a vision for the future landscape of the North Central region and the management of its natural resources (section 4.3).

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

Central Goldfields Shire Council administers the planning scheme for an area that includes the park and assesses developments that could have an impact on park values. Parks Victoria provides input into planning applications through DSE to the Council where changes to land use or development may impact on the park (section 7.2). The Council is also responsible for maintaining and upgrading a number of roads adjoining the park (table 3).

Through Aboriginal Affairs Victoria (AAV), the Department of Planning and Community Development (DPCD) has responsibility for administering legislation protecting cultural heritage (section 5.1). DPCD, AAV and the relevant Registered Aboriginal Party advise Parks Victoria on Aboriginal cultural heritage matters (section 5.1).

Tourism Victoria is the State government authority responsible for developing and marketing Victoria to Australian and international travellers.

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

Aim

- Enhance park management by collaborating with other agencies to ensure they give appropriate consideration to park values in planning and implementing activities that relate to the park.

Management strategies

- *Work collaboratively with all agencies to implement the plan vision and direction. In particular, work with:*
 - *DSE regarding future planning and management, including protection of flora and fauna from potentially threatening processes and fire management*
 - *North Central Catchment Management Authority in the development of appropriate actions in the Regional Catchment Strategies to assist in reducing impacts of land use and management on the park*
 - *Country Fire Authority and DSE to ensure safety and protect park values in managing fire within and around the park*
 - *AAV and the relevant Registered Aboriginal Party on issues relating to cultural heritage protection;*
 - *Heritage Victoria on heritage management and compliance with the Heritage Act*

- *State and regional tourism authorities to promote the park in regional visitor information centres and in regional tourism strategies*
- *Central Goldfields Shire Council regarding administration of the planning scheme, including input to proposals for adjacent or nearby developments that may impact on the park and the promotion of responsible pet ownership (section 7.2)*
- *Commonwealth Department of the Environment and Water Resources on the management of regional ecosystem conservation issues.*

9 PLAN IMPLEMENTATION

9.1 Delivery and reporting

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

A priority list of all the strategies in the plan will be used to guide routine management, and identify detailed actions in annual regional programs. Management actions are planned each year in response to available resources and outstanding actions and priorities may change, often due to emerging issues.

Each year, progress towards implementing the plan will be reviewed in order to inform the following year's program. Staff report internally against 'on time and within budget' delivery of regional programs and whether the completed strategy has achieved the objective.

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

Many aspects of implementation will involve collaboration with a range of individuals, groups and agencies. Traditional Owners in particular will have considerable involvement in implementation.

Implementation of the plan will be consistent with Parks Victoria's commitment to sustainable practices, which involves the delivery of operations, services and facilities in an ecologically and socially responsible manner with minimal use of expendable resources and minimal generation of waste. The threat of accelerated climate change on the parks ecosystems and wildlife is of increasing concern. As part of its Healthy Parks Healthy People initiative, Parks Victoria is changing practices to reduce greenhouse emissions and its environmental footprint.

In implementing the plan, management will respond to monitoring and research information as it emerges. Parks Victoria's environmental management framework makes

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

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

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

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

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

9.2 Plan amendment

During the 10-year life of the plan, amendments to the plan may only be made by the Secretary to DSE, following an authorised

process which includes appropriate community consultation.

Circumstances that might lead to amendment of the plan include:

- the results of monitoring or research, management experience or new information (such as greater understanding of new threatening processes) which indicate the need for a change in management direction
- significant changes in visitation or use
- a change in policy that calls into question plan objectives
- new legislation (such as significant boundary changes).

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

9.3 Evaluation and review

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

Protecting natural values

- Maintaining self-sustaining populations of flora, fauna and vegetation communities.
- In the long-term, restoring vegetation communities to a more natural structure.
- Meeting prescribed burning targets.
- Meeting community expectations as a good environmental manager.
- Timely management intervention to minimise threats.
- Minimal impact of permitted uses.
- Compliance with park regulations.

Protecting cultural values

- Progress towards working with the relevant Registered Aboriginal Party in

managing the park and in protecting and interpreting Indigenous cultural heritage.

- Meeting community expectations as a good manager of historic places.
- Timely management intervention to avoid damaging activities and threats.

Managing recreation and visitor use

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

Providing for research and promoting understanding

- Progress towards Indigenous views and aspirations in the park's planning and management.
- Improving understanding of the key threats, particularly management of wallabies and kangaroos.
- Ongoing Indigenous and broader community participation.

Methods for evaluating the benefits of the plan are likely to be refined over time. Parks Victoria has introduced a range of structured monitoring practices to collect standardised and scientifically-robust information. In particular, these will improve understanding of the outcomes of management on natural

values; and allow improved reporting and assessment of performance.

Parks Victoria also partners external research agencies to enhance knowledge and understanding of the values and features of the park and inform management decisions,

particularly in relation to pest and fire management. By using sound monitoring and assessment methods, this will strengthen the basis for comparing management performance over time.

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Personal communication

A. Branch – Eucalyptus distillery operator

GLOSSARY

Aboriginal cultural heritage – Aboriginal places objects and human remains.

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

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

Catchment – the area of land that drains to a watercourse or estuary.

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

Crown land – land belonging to the State.

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

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

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

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

Freehold land – land held in private ownership.

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

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

Indigenous communities – Indigenous people who share cultural values and activities relating to the park.

Indigenous people – people who are descendants of Aboriginal Australians and Torres Strait Islanders.

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

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

Matters of National Environmental Significance – defined by the Environment Protection and Biodiversity Conservation Act to include: World Heritage Properties; Ramsar wetlands; nationally threatened species and communities; migratory species protected under international agreements; the Commonwealth marine environment; and nuclear actions.

Nature-based tourism – tourism that provides a range of experiences that rely on attractions directly related to the natural environment.

Pest – exotic organisms (plants, animals or pathogens) that, if introduced outside their natural or previous distribution, cause significant changes to habitats, food chains, ecosystems or human health by feeding on or competing with native species.

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

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

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

Stakeholder – a person or organisation who may affect, be affected by, or perceive themselves to be affected by, a decision or activity.

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

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

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

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

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

Acronyms

AAV – Aboriginal Affairs Victoria

ANZECC – former Australian and New Zealand Environment and Conservation Council

CFA – Country Fire Authority

DPI – Department of Primary Industries

DSE – Department of Sustainability and Environment

DPCD – Department of Planning and Community Development

ECC – former Environment Conservation Council.

EPBC Act – *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)

EVC – Ecological Vegetation Class

FFG Act – *Flora and Fauna Guarantee Act 1988* (Vic.)

NCCMA – North Central Catchment Management Authority

NRE – former Department of Natural Resources and Environment.

PMAV – Prospectors and Miners Association

TFA – Tourist Fossicking Authority

APPENDIX 1 MANAGEMENT OBJECTIVES FOR STATE PARKS

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

For an up-to-date copy of the *National Parks Act 1975* (Vic.), refer to Victorian Acts on the Victorian Legislation and Parliamentary Documents website, www.legislation.vic.gov.au.

4. Objects of the Act

The objects of this Act are –

(a) to make provision, in respect of national parks, State parks, marine national parks and marine sanctuaries –

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

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

17. National parks and State parks

(2) The Secretary shall, subject to this Act –

(a) ensure that each national park and State park is controlled and managed, in accordance with the objects of this Act, in a manner that will -

- (i) preserve and protect the park in its natural condition for the use, enjoyment and education of the public;
- (ii) preserve and protect indigenous flora and fauna in the park;
- (iii) exterminate or control exotic fauna in the park;
- (iv) eradicate or control exotic flora in the park; and
- (v) preserve and protect wilderness areas in the park and features in the park of scenic, archaeological, ecological, geological, historic or other scientific interest;
 - (aa) have regard to all classes of management actions that may be implemented for the purposes of maintaining and improving the ecological function of the park;
 - (b) ensure that appropriate and sufficient measures are taken to protect each national park and State park from injury by fire;
 - (ba) ensure that appropriate and sufficient measures are taken –
 - (i) to protect designated water supply catchment areas; and
 - (ii) to maintain water quality of and otherwise protect the water resources in those areas; and
 - (iii) to restrict human activity in those areas for the purposes of sub-paragraphs (i) and (ii);
 - (c) promote and encourage the use and enjoyment of national parks and State parks by the public and the understanding and recognition of the purpose and significance of national parks and State parks; and
 - (d) prepare a plan of management in respect of each national park and State park.

APPENDIX 2 SUBMISSIONS ON THE DRAFT MANAGEMENT PLAN

A total of 85 submissions were received on the Draft Management Plan (8 August – 22 October 2007), from the following organisations and individuals.

ORGANISATION NAME	SUBMISSION No.	INDIVIDUAL NAME	SUBMISSION No.
Submissions from groups	Total: 14	Max Muir	22
Four Wheel Drive Victoria	2	Bernie Lellyett	25
Alluvial Gold Prospectors Australia MSN	7	Lorraine Grubb	26
Victorian Metal Detector and Prospectors Association Inc	10	Alan Grubb	28
West Gippsland Branch, PMAV	16	Geoff Lee	29
Aboriginal Affairs Victoria	17	John Kelly	31
The Australian Gold Detecting/Prospecting Community	20	Derek Gravenor	32
Bird Observation and Conservation Australia	23	Steve and Jenny Dingwall	33
Heritage Victoria	24	Tom and Marjorie Tully	34
North Central Catchment Management Authority	30	John Tottenham	36
Alluvial Gold Prospectors Australia MSN	35, 82	John Fricke	38
Golden Triangle Tours	37	Simon Robinson	39
Victorian Seekers Club	48	John Van Den Heuvel	40
PMAV	75	Brian Moran	41
		Brian Grady	42
		No submissions recorded	43-47
		John Shaw	49
		Ralph Palmer	50
		Russell Shaw	51
		William Gray	52
		Ted Cox	53
		John Douglas	54
		DS Pinsent	55
		Malcolm Coulsell	56
		Valerie Lippiagwell	57
		Owen Bedford	58
		Barry Weston	59
		Paul Wilks	60
		Carmel and Mark Arnold	61
		James Spencer	62
		Don Thomson	63
		Tina Whelan	64
		Tom and Marjorie Beaglehole	65
		M Hall	66
		Bob Lake	67
		Barry Skinner	68
INDIVIDUAL NAME	SUBMISSION No.		
Submissions from individuals	Total: 71		
Martin O'Brien	1		
Hans Banaszek	3		
Les Bird	4		
BJ Mansfield	5, 81		
William Schulz	6, 19, 27		
Hans Fenz	8		
M Scherer	9		
Eugene Dimitriadis	11		
Don Brereton	12		
Peter Maffey	13		
TJ O'Dwyer	14, 84		
Dianne Brandolin	15		
Louis Hajdu	18		
Phillip Curmi	21		

Appendix 2 cont.

INDIVIDUAL NAME	SUBMISSION No.
Lars Lennartsson	69
Hermann Steffan	70
Geoff Shawcross	71
Gisela Graser	72
Chris Skinner	73
Howard Short	74
Darren Hardy	76
R Whiting	77
David Bentley	78
Barbara Darken	79
HW and LA Lameris	80
William and Doris Anderson	83
C Alderton	85
Rick and Tammy Bryant	86
Ian Brodie	87
Geoff Hutchesson	88
Pam Brodie	89
Francois Gilbert	90

APPENDIX 3 RARE AND THREATENED FLORA

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS		
		TIV	FFG	EPBC
<i>Glycine latrobeana</i>	Clover Glycine	V	L	v
<i>Grevillea dryphylla</i>	Goldfields Grevillea	R		
<i>Levenhookia sonderi</i>	Slender Stylewort	R		
<i>Olearia tubuliflora</i>	Rayless Daisy-bush	R		
<i>Prostanthera saxicloa</i> var. <i>bracteolata</i>	Slender Mint-bush	R		
<i>Pterostylis despectans</i>	Lowly Greenhood	E	L	e
<i>Stylidium calaratum</i> var. <i>ecorne</i>	Book Triggerplant	K		
<i>Thelymitra mackibbinii</i>	Brilliant Sun-orchid	E	L	v
<i>Thelymitra</i> × <i>macmillanii</i>	Crimson Sun-orchid	V		

Source: DSE 2006b.

Conservation status

TIV status:

E endangered
 V vulnerable
 R rare
 K poorly known

TIV – Threatened in Victoria

FFG – Flora and Fauna Guarantee Act

EPBC – Environmental Protection and Biodiversity
 Conservation Act (Cwlth)

FFG status

L listed under the Flora and Fauna Guarantee Act

EPBC status:

e endangered
 v vulnerable

APPENDIX 4 RARE AND THREATENED FAUNA

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS		
		TIV	FFG	EPBC
MAMMALS				
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	VU	L	
BIRDS				
<i>Accipiter novaehollandiae</i>	Grey Goshawk	VU	L	
<i>Calamanthus pyrrhopygius</i>	Chestnut-rumped Heathwren	VU	L	
<i>Chrysococcyx osculans</i>	Black-eared Cuckoo	NT		
<i>Cinclosoma punctatum</i>	Spotted Quail-thrush	NT		
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern ssp.)	NT	LC	
<i>Grantiella picta</i>	Painted Honeyeater	VU	L, LC	
<i>Lathamus discolor</i>	Swift Parrot	EN	L, LC	EN
<i>Melanodryas cucullata</i>	Hooded Robin	NT	L, LC	
<i>Melithreptus gularis</i>	Black-chinned Honeyeater	NT	LC	
<i>Ninox strenua</i>	Powerful Owl	VU	L	
<i>Oreoica gutturalis</i>	Crested Bellbird	NT	L	
<i>Phalacrocorax varius</i>	Pied Cormorant	NT		
<i>Pyrrholaemus sagittatus</i>	Speckled Warbler	VU	L, LC	
<i>Stagonopleura guttata</i>	Diamond Firetail	VU	L, LC	
<i>Xanthomyza phrygia</i>	Regent Honeyeater	CR	L, LC	EN
AMPHIBIANS				
<i>Pseudophryne bibronii</i>	Brown Toadlet	EN	L	
<i>Pseudophryne semimarmorata</i>	Southern Toadlet	VU		

Source: DSE 2006c.

Conservation status

TIV status:

CR critically endangered

EN endangered

VU vulnerable

NT lower risk or near threatened

EPBC status:

EN endangered

TIV – Threatened in Victoria

FFG – Flora and Fauna Guarantee Act

EPBC – Environmental Protection and Biodiversity
Conservation Act (Cwlth)

FFG Status

L listed under Flora and Fauna Guarantee Act

LC Associated with the Flora and Fauna Guarantee Act
listed Victorian temperate-woodland bird community

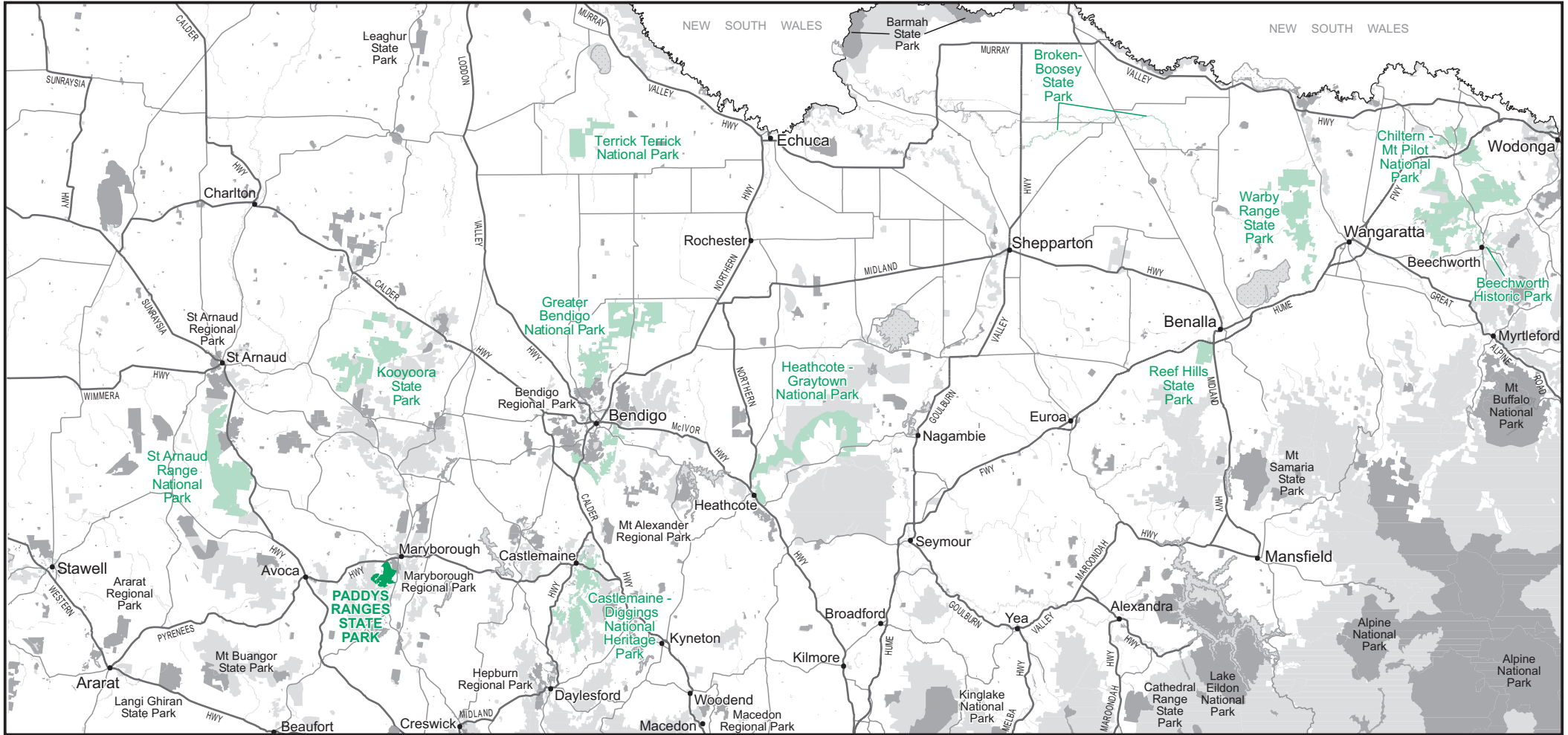









Figure 1 REGIONAL LOCALITY PLAN
PADDYS RANGES STATE PARK

-  Freeway/Highway
-  Other major road
-  Paddys Ranges State Park
-  Other Box-Ironbark Parks
-  Other Parks & Reserves
-  Other Public Land
-  Waterbody



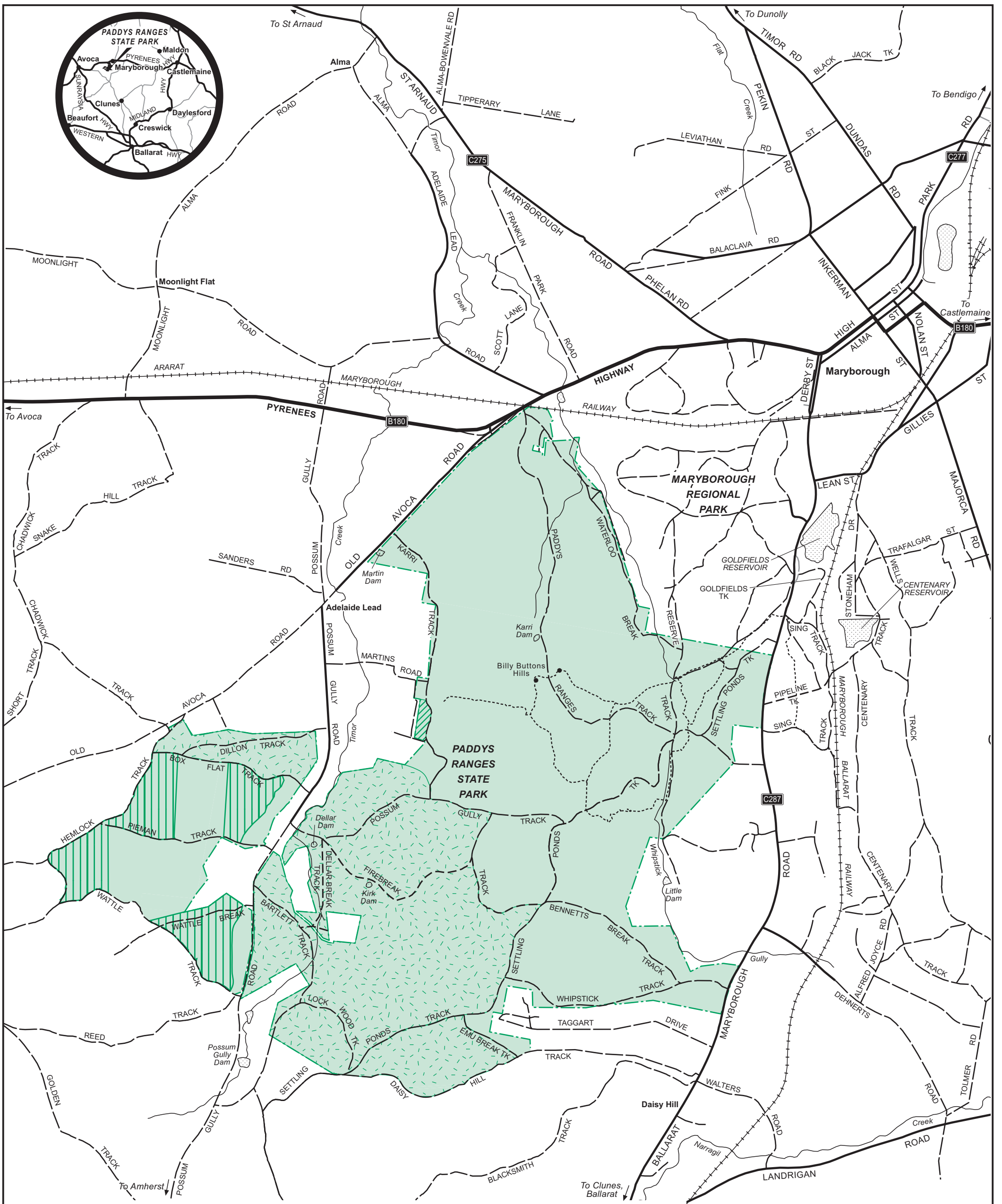


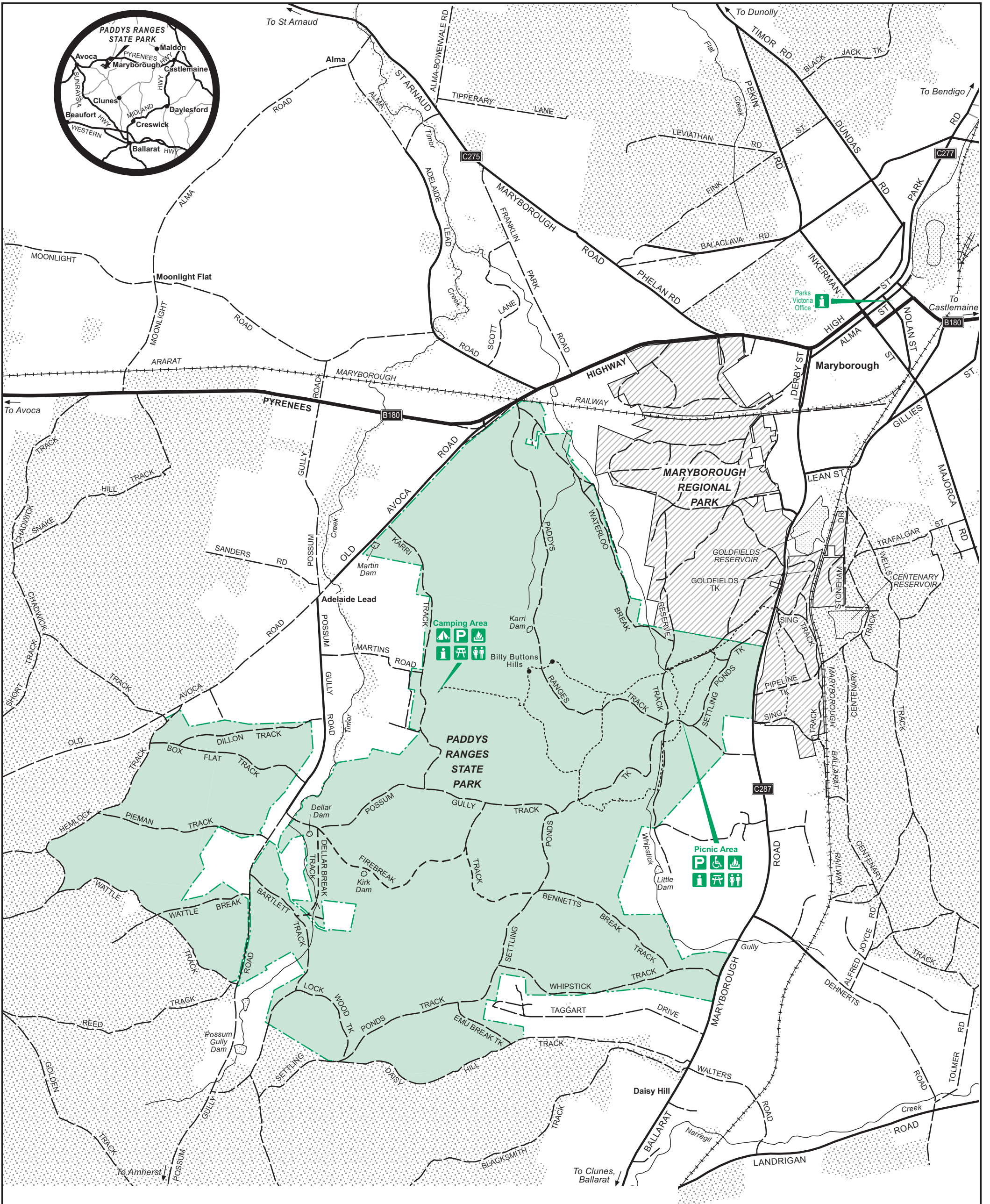
Figure 2 MANAGEMENT ZONE & OVERLAYS PADDYS RANGES STATE PARK

- | | |
|-----------------------|--|
| Highway | ZONE |
| Sealed road | Conservation & Recreation |
| Unsealed road | OVERLAY |
| Vehicular track (4wd) | Special Protection Area - Natural Values |
| Walking track | Special Management Area - Research |
| Water body | Land Use Designation - Prospecting |



Cartography by Spatial Vision 2009 M/6515





- Highway
- Sealed road
- Unsealed road
- Vehicular track (4wd)
- Walking track
- Water body
- State Park
- Regional Park
- State Forest

- Recreational Facilities**
- Camping
 - Car park
 - Facilities for people with disabilities
 - Fireplace (replace with BBQ)
 - Park information
 - Picnic table
 - Toilets

Figure 3 VISITOR ACCESS, FACILITIES & ADJACENT LAND TENURE
PADDYS RANGES STATE PARK

