

Heathcote-Graytown National Park

and Spring Creek Nature Conservation Reserve



Management Plan February 2008

This Management Plan for Heathcote-Graytown National Park and Spring Creek Nature Conservation Reserve is approved for implementation. Its purpose is to direct all aspects of management of the planning area until the plan is reviewed.

A Draft Management Plan for the area was published in September 2006. Fourteen submissions were received. All submissions have been considered in preparing this approved Management Plan.

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**HEATHCOTE–GRAYTOWN NATIONAL PARK
AND SPRING CREEK NATURE CONSERVATION RESERVE
MANAGEMENT PLAN**

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Cover: Grey Grass Trees, Heathcote–Graytown National Park (Photo: Norm Stimson)

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. Special thanks go to the Heathcote–Graytown Management Plan Advisory Group: Neville Barwick, Stuart Dashper, Mark Hyde, Lauren Kilpatrick, Pat McCarthy, Phil McPherson, Marion Riley, Ken Slatter, Tom Smith, Jon Theobald, Carol Thomas and Melanie Tranter.

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

Disclaimers

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

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

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

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FOREWORD

The Heathcote–Graytown National Park and Spring Creek Nature Conservation Reserve, together with adjacent forested areas, form the most extensive tract of Box-Ironbark forest in Victoria. They protect critical habitat for Powerful Owl, Swift Parrot, Brush-tailed Phascogale and Bibron's Toadlet, and one of only six known Victorian localities in which the endangered Crimson Spider-orchid occurs.

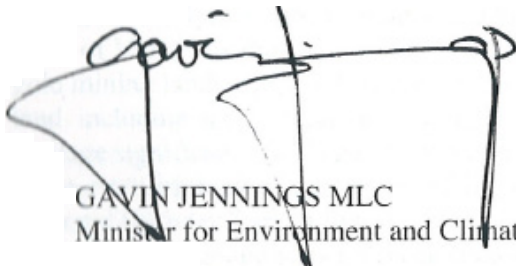
Parts of the park and reserve are within *Country* of Ngurai-illam Wurrung, Dja Dja Wurrung and Taungurung communities. This plan respects the views of Traditional Owners. The cultural landscapes, heritage places and artefacts of the planning area hold important meaning to both Indigenous and non-Indigenous people. Most identified heritage places relate to the post-settlement mining and forest industry heritage of the planning area. These industries supported the early economic development of the region and the related heritage places hold special meaning to those in the community whose ancestors lived and worked in the planning area.

There are opportunities for visitors to discover and appreciate the natural and heritage values, and to combine this with more active recreational pursuits like bushwalking, prospecting or horse riding.

This plan seeks to strengthen the relationships between Parks Victoria and the community groups with particular interests in the planning area, and encourage the community groups to support management of the area with their enthusiasm, knowledge and skills.

The long-term management framework established in this plan will protect the significant natural and cultural values of the planning area, and provide appropriate recreational opportunities.

I thank the Heathcote–Graytown Management Plan Advisory Group for their valuable contribution to the plan, and also wish to thank those individuals and organisations who made submissions on the draft plan. I look forward to the community's ongoing support for the management of Heathcote–Graytown National Park and Spring Creek Nature Conservation Reserve.



GAVIN JENNINGS MLC
Minister for Environment and Climate Change

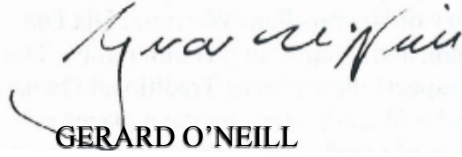
APPROVED MANAGEMENT PLAN

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

The plan provides the basis for the future management of Heathcote–Graytown National Park and Spring Creek Nature Conservation Reserve. It was finalised following consideration of the 14 submissions received on the Draft Management Plan.



PETER HARRIS
Secretary to the
Department of Sustainability and Environment



GERARD O'NEILL
Acting Chief Executive
Parks Victoria

INTRODUCTION TO BOX–IRONBARK PARKS

The Box–Ironbark forests and woodlands lie inland of the Great Divide 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 (figure 1). At the time of European settlement they covered almost three million ha, 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 inspired poets, writers and artists, both past and contemporary, including Banjo Patterson, John Wolseley and Samuel Thomas Gill. With the creation of a highly protected system of parks and reserves in 2002, the future of these forests and woodlands is assured.

Box–Ironbark areas are part of *Country* of Traditional Owners. There are many areas rich in archaeological, cultural and spiritual significance throughout the region. Increasingly, Indigenous communities are 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, a first for 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 forestry, gold mining, apiculture and agriculture since the 1830s. The major reefs and underground ore bodies helped establish and maintain towns, and together with forest products, contributed 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 because it 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.

Interestingly, the gold mining, which had a significant initial impact on these environments, also contributed to their protection. To ensure supplies of timber for mining needs, the government established forest reserves, some of which became the setting for settlements and communities 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. The most extensive classes originally were Plains Grassy Woodland, Grassy Woodland and Box–Ironbark Forest, which are all now considered endangered or depleted.

Fragmentation and loss of habitat mean that almost 300 Box–Ironbark plant species (out of a total of 1500 vascular plant species), and 53 of a total of 250 vertebrate fauna species, are now considered threatened. Many species, particularly of 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 many hollows vital for 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 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 these parks contribute to halting the decline of threatened species and provide opportunities for increasing community understanding of the values of Box–Ironbark forests and woodlands and development of park related tourism 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 for 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 protection, promotion and management of the parks.

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. This 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 cultural 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 integral to the character of growing regional cities such as Bendigo. They have great potential as a complementary product for people who come to the region for other reasons, such as seeking social, recreational, sporting or heritage experiences. There is also potential for Indigenous communities and products to support the development and delivery of Box–Ironbark experiences for visitors.

This plan explains the Box–Ironbark values and attractions within the context of the Heathcote–Graytown National Park and the reserve, and sets out how they will be protected and managed.

SUMMARY

Heathcote–Graytown National Park (12 700 ha) and the Spring Creek Nature Conservation Reserve (493 ha) (collectively referred to as the ‘planning area’) contain significant natural and cultural features and provide opportunities for a range of recreational activities.

The planning area, together with adjacent forested areas in State forests, reserves and Commonwealth land, forms the most extensive tract of Box–Ironbark forest in Victoria.

Indigenous tradition indicates that the planning area covers the *Country* of a number of Indigenous groups. Indigenous groups that have interests in the planning area include the Ngurai-illam Wurrung, Bendigo Dja Dja Wurrung Aboriginal Association Incorporated, Taungurung Clans Aboriginal Corporation and the Yorta Yorta Nations¹. The park contains Indigenous places and objects that are significant to the Traditional Owners and Indigenous people.

Significant natural features of the planning area include creekline and lower valley vegetation communities (Creekline Grassy Woodland and Alluvial Terraces Herb-rich Woodland) that are endangered or vulnerable in the Goldfields bioregion. These vegetation communities host the majority of the planning area’s large old trees, and fauna refuges including important habitat for the planning area’s 26 threatened fauna species. The planning area also includes other critical fauna habitats — five Powerful Owl management areas and one Swift Parrot priority site. The whole planning area is a priority management area for the Brush-tailed Phascogale. Other significant fauna species of the planning area include the Regent Honeyeater, Squirrel Glider, Common Dunnart and Bibron’s Toadlet.

Of the planning area’s 363 native vascular flora species, nine are threatened. The most significant of these are the Crimson Spider-orchid, Scented Bush-pea and Clover Glycine.

¹ There are a number of alternative spellings and pronunciations of Taungurung and Dja Dja Wurrung.

The cultural landscape of the planning area includes places that have important meaning for both Indigenous and non-Indigenous people. Most identified sites relate to the extensive post-settlement forestry, and to localised mining industries. These industries supported the economic development of the region. Relics of the Graytown prisoner of war camp, coupled with the community’s post-World War 2 stories and oral histories, are powerful tools for interpreting the cultural heritage values of the area.

Popular recreation activities in the planning area include bushwalking, nature appreciation, prospecting, bike riding, picnicking, camping, dog walking, horse riding and car and motorbike touring.

This management plan sets the framework for sustainable management of the planning area to enhance visitor enjoyment and appreciation of the planning area, while protecting and conserving the planning area’s values.

Key elements of the plan include:

- Restoration of more natural age class distributions, structures and floristic diversity in vegetation communities over the long-term, while preserving Aboriginal and historical places (including landscapes) of cultural significance.
- Maintenance and, in the long-term if practicable, restoration of viable populations of threatened flora and fauna.
- Encouragement of sustainable recreational activities in appropriate locations, and in ways that minimise impacts on planning area values and other visitors.
- Management of the Mount Black Reference Area to minimise human impacts.
- Management of pest plants, animals and diseases to minimise impacts on all planning area values.
- Protection of Aboriginal places and objects.
- Respect for Indigenous knowledge relating to *Country*, and appropriate reflection of the Traditional Owners’ knowledge of and

- interests in the land and their aspirations for the planning area's management.
- Promotion and interpretation of Aboriginal places and objects in accordance with the views of Traditional Owners.
- Protection, conservation and interpretation of historic places and objects.
- Enhancement of community awareness of, and sense of custodianship for, the planning area.
- Encouragement and support of community involvement in the planning area's management, particularly among those with traditional or historical associations or other special interests in the planning area.
- Engagement of the community in information, interpretation and education programs from development to implementation.
- Encouragement and support of community partnership projects in the planning area or surrounding areas that protect and enhance planning area values.

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1 INTRODUCTION

1.1 Location and planning area

The planning area is in north-central Victoria, approximately 110 km north of Melbourne and 45 km east of Bendigo (figure 1). It forms a narrow crescent oriented along a south-west to north-east axis, about 30 km in length and varying from 1 to 7 km in width. It is around 15 km west of Nagambie and 20 km south-west of Rushworth, and abuts the north-eastern boundary of Heathcote township.

The planning area comprises:

- Heathcote–Graytown National Park (12 700 ha), referred to in the plan as ‘the park’
- Spring Creek Nature Conservation Reserve (493 ha) as proposed by the Environment Conservation Council (ECC 2001), referred to in the plan as ‘the Spring Creek NCR’ or ‘the reserve’.

The park includes areas derived from:

- McIvor Range Scenic Reserve (780 ha), adjacent to Heathcote, bounded by Forest Drive, Heathcote – North Costerfield Road, Heathcote – Nagambie Road and Hylands Track, and referred to as McIvor Range in the plan
- Mount Ida Flora Reserve (1265 ha), at the western end of the park
- Rushworth State Forest (9030 ha)
- Mount Black Flora Reserve (1337 ha)
- Graytown Historic Reserve (41 ha).

The park includes parts of the historic township of Graytown.

Mount Black Reference Area (493 ha) is in the north-western part of the park.

The Spring Creek NCR as proposed will include areas derived from:

- Rushworth–Heathcote State Forest (371 ha)
- Mount Black Flora Reserve (104 ha)
- unused government roads (16 ha) and unreserved Crown land (2 ha).

1.2 Creation of the park and reserve

The Heathcote–Graytown National Park was included in Schedule Two of the *National Parks Act 1975* (Vic.) as a result of the *National Parks (Box–Ironbark and Other Parks) Act 2002* (Vic.) on 30 October 2002. Minor amendments were made to the park boundary in 2004.

The park resulted from Recommendation A5 of the Environment Conservation Council’s *Box–Ironbark Forests and Woodlands Investigation Final Report* (ECC 2001), which was accepted by the Victorian Government in 2002 (Victorian Government 2002).

The reserve was recommended as a Nature Conservation Reserve by the Environment Conservation Council (ECC) in the *Box–Ironbark Investigation* (ECC 2001) and accepted by the Victorian Government in 2002 (Victorian Government 2002) (section 2.5).

1.3 Plan development

This Management Plan was prepared by Parks Victoria, with significant input from the Heathcote–Graytown Management Plan Advisory Group and other stakeholders. It takes into account existing information, reports and research findings that relate to the planning area, and is informed and supported by a range of best practice management systems.

The plan is a strategic guide for future management of the planning area. As a public document the plan establishes how Parks Victoria will protect the planning area’s natural and cultural values, and the services and facilities that will be provided to help visitors to enjoy, appreciate and understand the planning area in ways that are consistent with the area’s protection. 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 planning area.

As a working document for the planning area, 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 September 2006, and 14 submissions were received (appendix 2).

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

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

- changes to accord with the provisions of the recently proclaimed *Aboriginal Heritage Act 2006* (Vic.)
- recognition that Graytown Public Cemetery is not part of the park and is managed by Trustees
- addition of a special management area around the Graytown Public Cemetery to protect unidentified heritage sites
- inclusion of additional information about the quality of vegetation within the planning area, including the vegetation structure, species diversity and coverage
- recognition of the occupation of tree hollows by European honey bees as a threat to fauna
- inclusion of information about specific pest plants and animals associated with Aboriginal earthen mounds
- inclusion of references to sources of additional heritage information
- provision for orienteering events in fauna refuge special protection areas during springtime under careful regulation rather than exclusion of orienteering
- amendment of road names to accord with usage by the Shire of Strathbogie.

This Management Plan will direct future management of the planning area, until reviewed (section 9.3).

2.1 Regional context

The planning area forms part of the Goldfields bioregion, and the park is one of four parks in the bioregion with national park status. Only 25% of the total area of the Goldfields bioregion is covered with native vegetation. Of this remaining native vegetation, approximately 3% is protected in the planning area (State of Victoria 2002; DSE 2004a).

The planning area is within the catchments of two major north-flowing rivers, the Campaspe to the west and the Goulburn to the east, which run either side of the planning area. The Campaspe River and its associated catchment areas fall within the management region of the North Central Catchment Management Authority (NCCMA), while the Goulburn River and its catchment areas are the responsibility of the Goulburn Broken Catchment Management Authority (GBCMA).

The planning area is influenced by activities on land abutting its extensive perimeter (section 4.3). About two thirds of the perimeter of the planning area abuts largely cleared agricultural freehold land. The Graytown Public Cemetery (section 5.2), and three other areas are totally surrounded by park (section 7.4).

About one quarter of the park perimeter abuts forested areas, including State forests and the Puckapunyal Military Area (section 7.4).

There is an increasing trend towards the establishment of ‘lifestyle properties’ on small acreages, particularly around regional centres such as Heathcote, Redcastle, Costerfield and Graytown.

The McIvor Range section of the park, which forms a backdrop to Heathcote township, forms 6% of the planning area’s boundary (section 7.4).

The planning area is a part of the largest remaining contiguous Box–Ironbark forest in Victoria, which stretches between Heathcote and Rushworth and includes State forest areas, Whroo Historic Area, and Whroo, Spring Plains and Gobarup Nature Conservation Reserves (ECC 2001). Other nearby forest and park areas include Spring Plains Nature Conservation Reserve (south of Heathcote),

Pink Cliffs (west of Heathcote), and Crosbie Nature Conservation Reserve CR (north of Heathcote). Nearby lake and wetland areas include Lake Eppalock to the west and Reedy Lake and Lake Nagambie to the east.

In and around the planning area, an extensive range of recreational opportunities are available, including bushwalking, bike riding, camping, car rallying, vehicle touring, dog walking, horse riding, hunting, orienteering, rogaining and prospecting. A range of camping opportunities are offered as well as accommodation ranging from caravan parks to motels. In areas to the north-east, including the Nagambie area, there are many recreational opportunities based around water activities such as swimming, canoeing and water-skiing.

Other regional tourism features include the historic gold mining area at Whroo Historic Area, the Goulburn Weir, Days Mill and historic buildings in regional towns. The Goldfields tourism product region covers the western end of the planning area, around Heathcote.

The planning area includes parts of three local government areas — City of Greater Bendigo (west of Old Coach Road and Link Track), Strathbogie Shire (most of the park area and all of the reserve east of these roads) and Campaspe Shire (a small area in the north of the park).

Indigenous tradition indicates that the planning area covers the *Country* of a number of Indigenous groups (section 5.1).

During the ECC’s six-year Box–Ironbark Forests and Woodlands Investigation (ECC 2001), community attitudes towards the establishment of a national park in the largest remaining Box–Ironbark forest between Heathcote and Rushworth varied greatly, from overwhelming support to strong and consistent opposition.

Many in the local and regional communities have historical associations with the Box–Ironbark forests, including the planning area, that are based on their history of involvement and dependence on the timber, mining and agricultural industries of the area. Several people’s oral histories detailing their historical

associations with the forests have been recorded (Reeves & Chisolm 2006).

Many people moving into ‘lifestyle properties’ on small acreages around the planning area are attracted by the natural values of the region.

2.2 Park and reserve significance and values

The planning area makes a valuable contribution to Victoria’s parks and reserves system, which aims to protect viable, comprehensive and adequate representative samples of the State’s natural environments.

Although established primarily for its natural values, the planning area includes places and landscapes that are significant to Indigenous and post-settlement communities. In particular, the post-settlement cultural landscapes reflect a long and continuous history of utilisation for mineral and timber resources. The coexistence of these natural and cultural features provides an interesting environment for visitors to appreciate past activities, enjoy various outdoor activities and begin to understand the area’s special characteristics.

The Heathcote–Graytown National Park is assigned the IUCN - World Conservation Union Category II of the United Nation’s List of National Parks and Protected Areas. Category II areas are managed mainly for ecosystem conservation and recreation. On a statewide basis, the park is rated as very high for the protection of natural values. The Spring Creek NCR is assigned Category 1A. Category 1A protected areas are managed primarily for science.

Significant features of the planning area include:

Natural values

- Extensive tracts of Box–Ironbark Forest, which cover most of the planning area (over 10 000 hectares). Box–Ironbark Forest is a depleted vegetation community in the Goldfields bioregion.
- Significant areas of intact Creepline Grassy Woodland and Alluvial Terraces Herb-rich Woodland vegetation communities, particularly along Spring Creek, that are endangered or vulnerable in the bioregion.

- Nine large old tree sites, covering an area of more than 1700 hectares, which provide critical habitat for a range of threatened fauna species.
- Mature stands of large, old Grey Grass Trees (*Xanthorrhoea glauca* subsp. *angustifolia*) (357 ha).
- Critical habitat for a range of species, including five Powerful Owl management areas totalling approximately 5000 ha, 11 fauna refuges totalling approximately 330 ha, one Swift Parrot priority site, and the whole planning area as a priority management area for the Brush-tailed Phascogale.
- At least 186 native vertebrate fauna species, including 26 threatened fauna species such as the Regent Honeyeater, Swift Parrot, Powerful Owl, Squirrel Glider, Brush-tailed Phascogale, Common Dunnart and Bibron’s Toadlet.
- At least 363 native vascular flora species, including nine threatened flora species such as the Crimson Spider-orchid, Scented Bush-pea and Clover Glycine.

Cultural values

- Rich cultural associations of Indigenous communities with *Country*.
- Places associated with different historical gold mining eras, from the early gold rush and bushrangers through to mining during the depression in the 1930s.
- Places and landscapes that reflect the extensive historical use of the planning area for timber utilisation and other resource extraction, including Graytown Forestry Camp and the Mount Black Quarry.
- The historic Graytown area, including mining sites and other remnants of this historic gold rush landscape.
- Relics of the Graytown prisoner of war camp, which was later used as an immigrant camp during the post-war migration boom.
- The strong community attachment through both historic and contemporary use of the Heathcote–Graytown forests by many

people in the local community and their ancestors.

- The Heathcote Powder Magazine, from the 19th century gold mining era, which is listed in the Victorian Heritage Register and National Estate Register.

Recreation and tourism values

- Opportunities for solitude in a natural setting only a short distance from regional towns and main roads.
- Scenic views from the planning area's high points: Mount Ida lookout, Viewing Rock (McIvor Range) and Melvilles Lookout.
- Opportunities for bushwalking, nature appreciation, camping, cultural heritage appreciation, prospecting, vehicle touring, dog walking, horse riding, mountain bike riding, orienteering and rogaining.

2.3 Evidence of past use

The extensive history of people living and undertaking activities in the planning area is evident from the long personal and historical associations that many in the local community have with it.

Indigenous people have a strong attachment to the whole landscape. Several Aboriginal places and objects have been identified, including an artefact scatter, an isolated artefact and scar trees of possible Aboriginal origin. Surveys to identify Aboriginal places and objects have yet to be undertaken over much of the planning area, and further evidence of past Indigenous use may be rediscovered, particularly in and around the creeklines and lower valleys (Murphy & Dugay-Grist 2005).

There is much evidence of the utilisation of the resources of the planning area since European settlement. Pastures and gold brought many people to the region, and the timber industry, which continued in some form until the park was created in 2002, kept them there (section 5.2).

Evidence of historic mining places, including puddling machines, dams, battery sites and camp sites, can be found throughout the planning area, representing several different mining eras from the late 1860s through to the 1970s (Bannear 1993). The majority of mining places are located around Graytown, in the

park and in the Redcastle area in adjacent State forest. The Graytown Public Cemetery, surrounded by the park, provides evidence of the harsh conditions endured by mining families of the time.

There is extensive historical evidence of timber harvesting and forest management regimes throughout the planning area, including landscapes of closely spaced and multi-stemmed (coppice) trees of varying age classes, scattered large trees that were protected from harvesting, charcoal burning pits, firewood collection areas lacking woody debris on the ground, and scattered 'cull trees' which were ringbarked in the 1920s and 1930s (Hall 1985a).

The Dargile plantation area (130 hectares) was used for experimental plantings, including exotic conifers and native non-indigenous tree species, from 1916 (FCV undated). Many of these trees remain in and around the Dargile visitor site. Some smaller non-indigenous plantations exist within the planning area, at Graytown and at Heathcote adjacent to the Heathcote Caravan Park.

The quarry at the base of Mt Black, with its three pits and loading ramps (Bannear 1997), supplied granite used in the construction of the Goulburn Weir from 1887 until 1891 (GMW 2005).

The Graytown prisoner of war camp is a special part of the heritage of the planning area. It was established in about 1941 and operated until about 1945. Prisoners worked in the nearby forests, cutting wood and growing vegetables at the back of the compound. Following its wartime use, the camp was used as an immigrant camp, where new migrants were sent to do two years service for the government, undertaking silvicultural work including cutting firewood. The adjacent site was used on and off as a forestry camp, and from 1962 until 1990 the site was used as a depot by the Forests Commission (D. Gilmore pers. comm.). Evidence relating to all of these uses, including concrete building foundations, cesspits, garden beds and fences, remain at this significant historic place (Bannear 1997) (section 5.2).

Other historic uses of the planning area include grazing of domestic stock and gravel extraction for road works. Grazing in the park

was phased out in accordance with government-accepted ECC recommendations (Victorian Government 2002).

Apiary sites within the planning area have been used for honey production since early settlement and will continue to be permitted, subject to regulation (section 7.2).

2.4 The park and reserve visitor

Visitors to the planning area come predominantly from local and regional towns, but also from elsewhere in Victoria and interstate. Some international visitors are attracted to the planning area and surrounding region, particularly for its significant geological features.

Visitors access information about the planning area from local and statewide tourism websites, the Parks Victoria website, Visitor Information Centres at Heathcote and Nagambie, and by word of mouth.

The main access routes to the planning area are the Northern Highway and the Heathcote–Nagambie Road. The majority of minor access roads to the planning area stem from the Heathcote–Nagambie Road.

People visit the planning area for a range of activities and experiences, some of the most common being scenic viewing, bird watching, prospecting, bushwalking, wildflower appreciation, cultural heritage appreciation, nature study, camping and bike riding.

Scenic viewing is popular all year round for people on short visits. The main features include Viewing Rock, Mount Ida and Melvilles Lookout, as well as stands of huge old Grey Grass Trees along the Mount Black Quarry road. Bushwalking, prospecting and heritage appreciation are moderately popular activities. They are undertaken all year round but are less common in mid summer.

Wildflower appreciation is very popular in spring, and bird watching can be seasonal depending on the specific interests of the visitor. The Number of visits and the interests and expectations of visitors to the planning area have yet to be surveyed.

Accommodation options in and around the planning area range from camping in the planning area or adjacent State forests to commercial accommodation, including

caravan parks, backpacker hostels, motels, bed and breakfasts and self-contained cottages in regional towns.

Visitation in the planning area could increase as its values become better known. The planning area is situated along major routes between Melbourne and towns along the Murray River. There are opportunities for industries seeking to attract tourists, including the Heathcote wine industry, to promote the planning area as a complementary tourist destination. There is also potential for licensed tour operators to offer their services in the planning area (section 6.11).

In terms of statewide priorities, Parks Victoria has rated Heathcote–Graytown National Park as a park of regional value for the provision of visitor services. An appreciation of the park's natural and cultural values will be promoted, together with picnicking, camping and heritage appreciation. Resources will focus on the Dargile visitor site and sites in the Graytown area.

2.5 Legislation and ECC recommendations

Legislation

Heathcote–Graytown National 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 the Heathcote–Graytown National Park (appendix 1).

The areas proposed for permanent reservation as Spring Creek NCR (section 1.2 and below) — Mount Black Flora Reserve and part of Rushworth–Heathcote State Forest — are currently reserved under the *Crown Land (Reserves) Act 1978* (Vic.) and the *Forests Act 1958* (Vic.) respectively (section 1.1). The areas are managed as nature conservation reserve (see below), in accordance with the Crown Land (Reserves Act and the *Land Act 1958* (Vic.)), will ultimately be administered

under regulations for Nature Conservation Reserves.

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

The *Native Title Act 1993* (Cwlth) applies to the management of the planning area. There are currently no applications for a native title determination concerning the planning area.

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

The *Parks Victoria Act 1998* (Vic.) enables management services for the park and reserve to be provided on behalf of the Secretary by Parks Victoria.

The National Parks (Park) Regulations 2003 apply to the park. Following the reservation of Spring Creek NCR the Crown Land (Reserves) (Nature Conservation Reserve) Regulations 2004 will apply to the reserve.

Other legislation and policies and guidelines (section 2.6) at both the Commonwealth and State levels apply to management of the planning area 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), recommended the creation of the Heathcote–Graytown National Park (Recommendation A5) and the Spring Creek NCR (Recommendation D48).

The ECC recommended that Heathcote–Graytown National Park be used in accordance with the general recommendations for national parks, which include:

- conserve and protect biodiversity and natural processes and protect natural landscapes
- protect Aboriginal places and significant historic places

- generally permit apiculture, orienteering and rogaining, horse, mountain and trail-bike riding, and research, subject to stringent conditions
- no permission for grazing by domestic stock, car rallies, hunting and the use and carrying of firearms; or for exploration and mining, except within existing operations within existing licences, as approved (section 7.2).

The ECC also recommended that Mount Black Flora Reserve and part of Rushworth–Heathcote State Forest be permanently reserved as Spring Creek NCR, and be used in accordance with the general recommendations for nature conservation reserves, which include:

- conserve and protect species, communities or habitats of indigenous animals and plants
- generally permit apiculture, passive recreation such as nature study and picnicking and other recreational activities subject to stringent conditions
- permit low-impact exploration for minerals subject to government approval on individual proposals
- no permission for grazing by domestic stock, car rallies, hunting and the use and carrying of firearms.

The former ECC also made a number of recommendations that relate to the planning area including:

- land managers continue with and further develop adaptive management research and monitoring programs, develop targeted new programs and apply the results where appropriate (R8)
- 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 (R15)
- Box–Ironbark public lands be available for a range of recreation activities for community enjoyment and appreciation and appropriate to the land use category R42).

All of these recommendations were accepted by government (Victorian Government 2002).

2.6 Policies and guidelines

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

- Indigenous Partnership Strategy and Action Plan (Parks Victoria 2005a)
- Recreation Framework for Box–Ironbark Public Land (DSE 2003c)
- Conservation Reserves Management Strategy (Parks Victoria 2003c).
- Heritage Management Strategy (Parks Victoria 2003b)
- Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002)
- 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)
- North West Region, Bendigo Fire District, Fire Protection Plan (DSE 2003b)
- Code of Practice for Fire Management on Public Land (DSE 2006c)
- Guidelines and Procedures for Ecological Burning on Public Land in Victoria (DSE 2004b)

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

- Victoria's Nature Based Tourism Strategy — Draft Plan 2007–2011 (Tourism Victoria 2007)
- Policy for Sustainable Recreation and Tourism on Victoria's Public Land (NRE 2002)
- *Victoria's Heritage — Strengthening our Communities* (Heritage Victoria 2006)
- North Central Regional Catchment Strategy 2003–2007 (NCCMA 2003b)
- Goulburn Broken Regional Catchment Strategy (GBCMA 2003).

3 STRATEGIC DIRECTIONS

3.1 Vision

The Heathcote–Graytown National Park and Spring Creek NCR convey to the visitor a story of tenacity and survival set in a lean, dry forest of box and ironbark.

The narrative is evident throughout the planning area in numerous geological exposures and vantage points. That the landscape has been shaped by layers of human activity can be seen from traces of Indigenous occupation, gold-mining, prisoner of war detention, settlement and timber-cutting.

The surprisingly wide range of indigenous flora, including rare orchids and Grey Grass Trees, the riparian vegetation and the large old trees of the forests, support prosperous populations of indigenous fauna, including the Brush-tailed Phascogale or Tuan, and provide seasonal displays of rare beauty.

Visitors from near and far experience the rich country by camping, prospecting, touring and walking the tracks and trails. Many from the local community have a sense of connection with the place that makes them fine custodians as well as active park users.

Sustainable management, well informed by ongoing community access and involvement, ensures that the natural, cultural and recreational values coexist in the park and reserve to form an eloquent and evolving landscape that is valued, respected and enjoyed by the whole community.

3.2 Management directions

All management of the planning area will be based on respect for the Traditional Owners' knowledge and cultural and traditional practices, and for the historical associations of the community, with the planning area.

The Traditional Owners' knowledge, interests in the area, and aspirations for the planning area, will be reflected in all management in accordance with legislation and policy.

Other major management directions for the planning area are outlined below.

Natural values conservation

- The vegetation in good condition will be maintained and restored to a more natural age-class distribution, structure and floristic diversity in the long-term.
- Viable population levels for threatened species will be restored and maintained where possible.
- Fauna habitat will be protected, particularly large old trees and woody debris on the ground.
- Natural values of the planning area will be enhanced by encouraging community partnership projects that protect or restore native vegetation links to the planning area.
- The Reference Area will be maintained in a relatively undisturbed state by keeping human interference to a minimum.
- An integrated response to pest plants, animals and other extensive or emerging threats at a landscape scale will be a high priority.
- The park will be protected from damage by wildfire through the implementation of approved DSE regional fire protection plans.
- Prescribed burning will be used where appropriate to improve the long-term health of specific vegetation communities.
- Research into the management requirements of significant flora and fauna communities will be encouraged.
- The impact of works and infrastructure on the park's natural values will be minimised.

Cultural values conservation

- All works will be managed so that significant cultural values are maintained.
- Aboriginal places and objects will be recognised, protected and conserved, and promoted and interpreted, in accordance with the views of the Traditional Owners.

- Historic places and objects will be conserved by protecting them from damaging or inappropriate activities.
- Research into Indigenous and historic cultural heritage of the planning area will be encouraged and supported as appropriate, in consultation with the relevant communities.

The park and reserve visit

- A range of quality recreational experiences will be maintained at sustainable levels.
- Sufficient access will be maintained for visitors to enjoy recreation opportunities in accordance with tables 4 and 6.
- Visitor understanding and appreciation of the planning area's natural and cultural values will be enhanced by a range of information, interpretation and education programs.
- Recreation activities will be managed, and visitors will be encouraged to behave, in ways that enhance the safety and enjoyment of visitors, and are consistent with protection of the planning area's values.
- Opportunities for visitors to readily access and enjoy solitude in attractive natural settings will be maintained.

Community awareness and involvement

- The wider community will be encouraged to become more aware of the planning area and appreciative of its values.
- Local communities and visitors will be encouraged to develop a sense of custodianship for the planning area, join a Friends group, and become involved in park and reserve management.
- Strong relationships will be developed with communities or groups that are interested in the planning area and are potential participants in its management.
- Strong collaborative partnerships will be developed with the Traditional Owners to facilitate the reflection of their knowledge, interests in the land, and aspirations for the planning area.

- Friends, volunteers and other interest groups will be encouraged to develop an understanding and appreciation of the park's values and of the rich and diverse knowledge and aspirations of the Traditional Owners and Indigenous communities.
- Community groups will be encouraged to participate in projects in or adjacent to the planning area that enhance the planning area's values.
- Parks Victoria will work in partnership with other agencies to achieve optimum outcomes that accord with the aims for the planning area.
- Ongoing opportunities will be given for communities, groups, individuals and other agencies to raise ideas or concerns, and share their interests, in relation to the planning area.

3.3 Zoning

Management zoning:

- provides a geographic framework in which to manage an area
- reflects the sensitivity, fragility and remoteness of natural values
- indicates which management directions have priority in different parts of an area
- indicates the types and levels of use appropriate throughout the area
- assists in minimising existing and potential conflicts between uses and activities, or between activities and the protection of the area's values
- provides a basis for assessing the suitability of future activities and development proposals.

Two management zones apply to the planning area: Conservation and Recreation Zone and Reference Area Zone. Six overlays apply to the planning area to highlight management requirements in addition to those of the underlying zones (table 1 and figure 2).

Details of zone and overlay characteristics are provided in table 1 and recreation opportunities in table 2.

TABLE 1 MANAGEMENT ZONES AND OVERLAYS

ZONE / OVERLAY	AREA/LOCATION	VALUES	MANAGEMENT AIM AND DIRECTIONS
ZONES			
Conservation and Recreation	12 833 ha, shown in figure 2. 97% of the planning area.	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.
Reference Area	Mount Black Reference Area 360 ha, shown in figure 2. 3% of planning area.	Relatively undisturbed representative land types and associated vegetation.	Protect viable samples of one or more land types that are relatively undisturbed for comparative study with similar land types elsewhere, by keeping all human interference to the minimum essential and ensuring as far as practicable that the only long-term change results from natural processes in accordance with Ministerial directives and Parks Victoria operational policies.
OVERLAYS			
Land Use Designation – Prospecting	12 600 ha, shown in figure 2. 95% of the planning area.	Recreational prospecting.	Allow searching for minerals while protecting biodiversity, catchment, geological and cultural values.
Special Protection Area – Large Old Trees	1700 ha, large old trees and 257 ha, large old Grey Grass Trees, as shown in figure 2. 15% of the planning area.	Areas containing significant numbers of large old trees, or large old Grey Grass Trees.	Protect individuals or groups of large old trees and large old Grey Grass Trees from damage by fire or management activities.
Special Protection Area – Fauna Refuges	330 ha, including 11 areas as shown in figure 2. 2.5% of the planning area.	Intact gully vegetation providing refuge for fauna in times of drought or fire, and important habitat for threatened species reproduction, particularly in spring.	Protect intact gully vegetation as fauna habitat, particularly for refuge use in times of drought or fire.
Special Management Area – Mount Ida Tower	< 1 ha.	Infrastructure including fire tower and telecommunications facilities.	Ensure construction, operation and maintenance of fire tower and telecommunications infrastructure are consistent with the protection of the park's natural and cultural values and the amenity of visitors.
Special Management Area – Phytophthora cinnamomi	214 ha, shown in figure 2. 2% of the planning area.	Natural values under threat from <i>P. cinnamomi</i> .	Protect soil and vegetation from the spread of <i>P. cinnamomi</i> at infected sites and nearby areas.
Special Management Area – Heritage	A 100 metre buffer around the Graytown Public Cemetery, < 1 ha.	Heritage places associated with the Graytown Public Cemetery.	Protect heritage places in the park associated with the Graytown Public Cemetery from damage or disturbance.

TABLE 2 SUMMARY OF RECREATIONAL OPPORTUNITIES

ACTIVITY	MANAGEMENT ZONES		OVERLAYS					
	1	2	3	4	5	6	7	8
(percentage of planning area)	(97%)	(3%)	(95%)	(15%)	(2.5%)	(<1%)	(2%)	(<1%)
Bike riding (section 6.6)	Y	N	Y	Y	Y	N	N	Y
Bird watching	Y	N	Y	Y	Y	N	N	Y
Bushwalking/hiking	Y	N	Y	Y	Y	N	N	Y
Dog walking on leash (section 6.7)	Y	N	Y	Y	N	N	N	N
Education/guided activities	Y	N	Y	Y	Y	N	N	Y
Campfires (section 6.3)	Y	N	Y	N	Y	N	N	N/A
Camping – designated (limited facilities) (section 6.5)	Y	N	Y	Y	Y	N	N	N
Camping – dispersed for hikers without vehicles (no facilities) (section 6.5)	Y	N	Y	Y	Y	N	N	N
Feeding wildlife	N	N	N	N	N	N	N	N
Fires in gas or liquid fuel fireplaces (section 6.3)	Y	N	Y	Y	Y	N	N	N
Fossil collection	N	N	N	N	N	N	N	N
4WD touring	Y	N	Y	Y	Y	N	N	Y
Hang gliding, paragliding	N	N	N	N	N	N	N	N
Horse riding (section 6.8)	Y	N	Y	Y	Y	N	N	Y
Hunting	N	N	N	N	N	N	N	N
Licensed tours	Y	N	Y	Y	Y	N	N	Y
Nature photography/painting	Y	N	Y	Y	Y	N	N	Y
Orienteering/rogaining (section 6.9)	Y	N	Y	Y	Y	N	N	N
Picnicking (section 6.3)	Y	N	Y	Y	Y	N	N	Y
Prospecting (section 6.10)	Y	N	Y	Y	Y	N	N	N
Rock climbing/abseiling	N	N	N	N	N/A	N	N/A	N/A
Sightseeing/scenic drives	Y	N	Y	Y	Y	N	N	Y
Trail bike/ motor bike riding (section 6.2)	Y	N	Y	Y	Y	N	N	Y

Notes: The use of chainsaws is not permitted.

The use of generators is subject to regulation (section 6.5).

Key

Management Zones:

- 1 Conservation and Recreation Zone
2 Reference Area Zone

Overlays:

- 3 Land Use Designation – Prospecting
4 Special Protection Area – Large Old Trees
5 Special Protection Area – Fauna Refuges
6 Special Management Area – Mount Ida Tower
7 Special Management Area – *Phytophthora cinnamomi*
8 Special Management Area – Heritage

- Y Yes — subject to strategies indicated in subsequent sections of the plan, and conditions prescribed under legislation, regulations and permits.
N Not permitted
N/A Not applicable

4 STRATEGIES FOR NATURAL VALUES CONSERVATION

4.1 Landscape

The landscape of the planning area is characterised by low hills and areas of higher relief that reflect their underlying distinctive geological formations, dissected by gullies with intermittent water courses.

The elevation of the planning area ranges from 160 metres to 440 metres at the Mount Ida lookout, which provides panoramic views. Other areas of higher relief in the planning area include Viewing Rock in the McIvor Range (380 metres), Mount Black (318 metres) and Mount Melville (300 metres). Mount Melville provides landscape views of the Graytown area.

Spring Creek is an intermittent stream, arising in the Mount Black Reference Area and flowing south through the planning area for about nine kilometres.

Around Graytown, the planning area is characterised by clusters of tall Grey Grass Trees, some of which are hundreds of years old.

Over much of the planning area, the Box–Ironbark forests, largely cut-over during the gold mining eras and historically managed intensively for timber production, are regenerating in a coppiced, multi-stemmed form. Scattered ‘cull trees’, ringbarked in the 1920s and 1930s, are evident throughout the planning area, although mostly to the north of Graytown (section 5.2).

Designed landscapes are evident around the Dargile area, where there are historical plantings of exotic and non-indigenous plant species and visitor facilities.

The landscape is an intrinsic element of *Country* for Traditional Owners, and certain parts of the landscape are significant to the community for aesthetic or cultural reasons.

Threats to the landscape character of the planning area include pest plant invasion (section 4.7), increasing visitor pressure, and the inappropriate design and siting of developments within or visible from the planning area.

Aim

- Protect the landscape character of the planning area, particularly places of high scenic quality or traditional or cultural significance, while allowing natural processes to continue.

Management strategies

- *Minimise the creation of visual intrusions into the natural landscape.*
- *Liaise with DSE and local government to minimise impacts on landscape views in the planning area (sections 7.4 and 8.3).*
- *Monitor and provide input to management activities of external agencies that have the potential to affect landscape values (section 8.3).*
- *Consider and respect the aesthetic and cultural significance of the landscape to the community in planning and implementing management activities (sections 5.1, 6.1 and 8.2).*
- *Minimise the impact of signs, visitor facilities and other park infrastructure on the natural and cultural landscape of the planning area.*
- *Rehabilitate, remove or ameliorate undesirable existing intrusions, where practicable.*

4.2 Geological features

The Heathcote area exposes Palaeozoic rocks that have great significance in telling the story of the geological evolution of central Victoria. The north–south Heathcote Fault Zone, which extends from Lancefield in the south to just east of Rochester in the north, separates Cambrian and Ordovician rocks to the west from younger Silurian and Devonian rocks to the east. Almost the entire planning area is located east of this dividing structure, but its evolution is intimately tied to the fault zone and the older rocks farther west. Most of the planning area is underlain by Silurian and Devonian sediments formed about 435–400 million years ago in a marine environment. These rocks were folded and faulted about 390 million years ago and juxtaposed against the

older Cambrian and Ordovician rocks. The Mount William Fault is a major fault along the eastern margin of the Heathcote Fault Zone. Part of this fault lies within the western part of the planning area, just west of the foot of Mount Ida, where it separates the Silurian and Devonian rocks to the east from the Cambrian and Ordovician rocks to the west.

Over millions of years the Palaeozoic bedrock has been eroded, forming some of the more recent geological features of the planning area. A good example is the extensive Quaternary hillwash aprons of colluvium that cover large areas of land surrounding the highly dissected Silurian and Devonian bedrock hills, from which the colluvium is derived (Edwards et al. 1998).

During the Silurian and Devonian periods the Ordovician rocks west of the Heathcote Fault Zone were part of a mountain range that was being actively eroded, supplying sediment into the ocean that covered the planning area. At this time a shoreline would have existed at about the position of the Heathcote Fault Zone. Initially sediments were deposited in relatively deep water, but in time shallow water conditions prevailed in the western part of the area. The rocks in the McIvor Range are good examples of shallow-water sandstones, as shown by abundant shelly fossils (Edwards et al. 1998).

The best exposure of the Mount Ida Formation occurs along the crest of the McIvor range. Mount Ida is important both for its geomorphology and as a vantage point to observe the surrounding geomorphic features. The Mount Ida formation is well exposed on Mount Ida. The formation contains fossils such as trilobites and brachiopods (Edwards et al. 1998), and encompasses two sites of regional geological significance: Mount Ida and a selwynite locality (GSA 2003).

The hard Mount Ida Formation has controlled the shape of the land near Mount Ida, and forms the western limb of the Mount Ida Syncline, a large fold that can be clearly seen in aerial photographs or from high vantage points (Edwards et al. 1998). The V shape of the ridge reflects the hinge of the Mount Ida Syncline (Edwards et al. 1998). This hinge continues north for about 10 km outside the planning area, to Ladys Pass, where it is faulted against the Cambrian volcanic rocks

(also known as greenstones) by the Mt William Fault. The range of hills which extends north of the planning area from Mount Ida, is the Mount Camel Range, the northern continuation of the Cambrian greenstone belt (Edwards et al. 1998) (section 5.1).

The geology of the area east of Mount Ida also has a strong influence on topography. Some of the ridges east of Mount Ida are formed by upturned layers of Broadford Formation sandstones, while the intervening valleys contain softer Puckapunyal Formation sediments in the hinges of synclines (Edwards et al. 1998).

The Mount Black Granite is a small granite body in the eastern part of the planning area. When the granite intruded into the sedimentary rocks in the Late Devonian it metamorphosed the surrounding Puckapunyal Formation, which is composed of sandstone and mudstone. The highest point on the aureole formed by this metamorphosis is Mount Black (318 m), which is well above the surrounding, more subdued, topography. The metamorphosed rocks (called hornfels) are well exposed at Mount Black and Mount Melville. The granite and aureole have been exposed by millions of years of erosion, which removed several kilometres of overlying rock.

The reef gold of the Graytown goldfield is hosted by siltstone and sandstone of the Dargile and Broadford formations. The sediments are folded into a series of open, upright, north-trending folds with shallow plunges. The goldfield appears to be confined to the hinge and eastern limb of the Graytown Anticline (Edwards et al. 1998). Spring Creek follows the Graytown Anticline (Edwards & Wohlt 1999).

According to Indigenous tradition, geomorphological features of the landscape are culturally significant.

Aim

- Protect and encourage study of significant geological and geomorphological sites.

Management strategies

- *Encourage research to identify landforms of special significance to the Traditional Owners and protect them from damaging*

or inappropriate activities (sections 5.1 and 8.2).

- Consider and respect the significance of landforms to the Traditional Owners in planning and implementing management activities (sections 4.1, 5.1 and 6.1).
- Maintain adequate walking access to significant geological and geomorphological sites for educational purposes, consistent with the protection of planning area values.
- Provide general interpretive material about the planning area's geological and landform features to visitors to enhance protection of sites and enhance their appreciation of the planning area's geological landform values (section 6.1).

4.3 Rivers and catchments

The planning area lies between two major rivers, the Campaspe River to the west and the Goulburn River to the east, which flow north from the Great Dividing Range in the south to their confluence with the Murray River at Echuca. The Campaspe catchment, covering 400 000 hectares, falls within the region of the North Central Catchment Management Authority (NCCMA). The Goulburn catchment, covering 1.6 million hectares, is within the region of the Goulburn Broken Catchment Management Authority (GBCMA). Catchment Management Authorities are the caretakers of river health and managers of the Environmental Water Reserve.

Rainfall is high in the southern mountainous areas of both catchments, trending to lower rainfall in the northern areas. Dryland farming is the predominant land use in both catchments, although irrigated agriculture is an important land use in the northern areas of both catchments.

Human activities that have affected the catchments include gold mining, the building of reservoirs and water supply systems, native vegetation clearing, farming and urban development (GBCMA 2003; NCCMA 2003b). In both the Goulburn and Campaspe catchments native vegetation has been retained in the southern mountainous areas of the catchments. These areas are generally reserved in parks or State forests. The more fertile lower slopes of the catchments, which were once

dominated by Box–Ironbark forests, and the open grassy woodlands of the plains country have been extensively cleared (NCCMA 2005; GBCMA 2005). Because of this clearing, many native vegetation communities are endangered or vulnerable, particularly riparian vegetation including Creekline Grassy Woodland. Many of these remnants of riparian vegetation are confined to public land. The headwaters of the streams originating in the planning area contain intact remnant vegetation, which could be complemented by the protection of remnants and revegetation projects on freehold land adjacent to the planning area. Priorities for riparian vegetation conservation and rehabilitation on freehold land in the catchments surrounding the planning area could be guided by the final report for the regional Drought Refuge Identification project (Robinson & Rowley 1994). The Catchment Management Authorities, in partnership with landholders, support works in the catchment such as fencing, revegetation and erosion control.

The headwaters of several small streams in the east of the planning area, together with approximately 9 km of Spring Creek within the planning area, contribute flows to Major Creek, which flows into the Goulburn River, a priority waterway (GBCMA 2005).

The major threats to remnant vegetation and waterways in the catchments include salinity, erosion, biodiversity decline, damage through stock access, decreased soil health, altered flow regimes, development activities and pest plant and animal invasion (NCCMA 2003a; NCCMA 2005; GBCMA 2005).

Drainage lines and creek valleys in the planning area have moderate to high potential for the presence of archaeological artefacts (Murphy & Dugay-Grist 2005) (sections 5.1 and 5.2).

Aim

- Protect and enhance river health and biodiversity values within the planning area.

Management strategies

- Ensure that appropriate erosion control measures are undertaken during all relevant works undertaken within the planning area.

- *In cooperation with the GBCMA, NCCMA and adjacent land managers, encourage and support projects that protect, enhance and link remnant vegetation and protect and enhance river health where such projects will complement planning area values (sections 4.4, 7.4 and 8.3).*
- *Liase and coordinate pest plant and animal control efforts with adjacent land managers, Department of Primary Industries, GBCMA and NCCMA (section 4.7).*

4.4 Vegetation

The planning area protects approximately 3% of the native vegetation in the Goldfields bioregion.

There are nine ecological vegetation communities (EVCs) in the planning area. Another six EVC types that have been mapped in the planning area, covering a total area of less than 5 ha, have not been verified in the field (Parks Victoria 2005b).

Box–Ironbark Forest is found on gently undulating rises and small hills that cover the majority of the planning area (77%), and is depleted in the bioregion. The next largest EVC, Heathy Dry Forest, covers 19% of the planning area, is of least concern in the bioregion. It is generally found on areas upslope of Box–Ironbark Forest, on ridge tops and particularly on the drier westerly or northerly aspects. Of the remaining 4% of the planning area, the most significant vegetation communities are in the lower valleys and along the ephemeral creeklines, and some small areas of vegetation on the higher points with soils and geology of metamorphic origins.

The Box–Ironbark Forest overstorey is dominated by Red Ironbark and Grey Box. Yellow Gum is also present on lower moister sites, and Red Box on drier upper slopes (Muir et al. 1995). The Heathy Dry Forest overstorey is dominated by Red Stringybark and Red Box. A distinct subcommunity of Heathy Dry Forest has been recognised around Mount Black, having Red Ironbark and Red Stringybark as the dominant overstorey species and Grey Grass Trees (*Xanthorrhoea glauca* subsp. *angustifolia*) as a distinctive understorey component (Muir et al. 1995). These Grey Grass Trees are up to three metres high and

have not been burnt in a long time. The Grey Grass Tree is one of many species susceptible to *P. cinnamomi* (section 4.7).

The vegetation of the lower valley and ephemeral creekline areas of the planning area is Creekline Grassy Woodland. It is often flanked on both sides by Alluvial Terraces Herb-rich Woodland on the low slopes, drainage lines and old alluvial plains of the gently undulating Box–Ironbark landscapes (Muir et al. 1995). The seasonal inundation along the creeklines and alluvial soils of both of these EVCs provides greater water availability and fertility compared to other EVCs in the planning area. Herbs are also able to flourish in these alluvial soils. In the bioregion, Alluvial Terraces Herb-rich Woodland is vulnerable and the Creekline Grassy Woodland is endangered.

The dominant overstorey trees along the Creeklines are large old River Red Gums, and Grey Box and Yellow Box are also present (Muir et al. 1995, DSE 2004a). The dominant overstorey species in Alluvial Terraces Herb-rich Woodland is Yellow Box, with Grey Box frequently codominant (Muir et al. 1995). Yellow Gum, Buloke and White Box also occur as overstorey species in some Alluvial Terraces Herb-rich Woodland areas (Parks Victoria 2005b).

An assessment of the quality of the major vegetation types in the planning area was undertaken in 2004 using the Habitat Hectares approach (Parkes et al. 2003). In general the vegetation of the planning area lacked understorey diversity and recruitment, had limited numbers of large old trees and limited occurrences of woody debris on the ground as compared to EVC benchmarks. This is largely a result of past land use practices throughout the planning area (section 2.3), although extended drought conditions with related increased browsing pressure also contributed significantly to the lack of understorey.

Large old trees are uncommon or absent in the Box–Ironbark Forest and Heathy Dry Forest areas that cover most of the planning area. The few large old trees that do remain in these areas are particularly important as faunal habitat (section 4.5). Large old trees are present in the valley and creekline areas, although currently representing about half of benchmark levels for EVCs in these areas.

The diversity, cover and recent recruitment of indigenous woody understorey species are currently low to moderate across the planning area. This may be attributed to grazing pressure, competition from weeds, and well-below average annual rainfall for more than three years prior to the vegetation condition assessments being undertaken in spring of 2004 (Parks Victoria 2005b).

The planning area supports at least 363 native vascular flora species (DSE 2006b). Information on bryophytes, fungi, lichens and algae in the planning area is not recorded. Nine threatened flora species are recorded in the planning area (appendix 3), the most significant of these being the Crimson Spider-orchid, Scented Bush-pea and Clover Glycine.

Threats to vegetation and flora in the planning area include:

- inadequate knowledge of ecosystem functions and species requirements
- grazing by introduced and native species, including goats, rabbits, hares, kangaroos and wallabies (section 4.7)
- weed invasion and competition, particularly in the lower valley and creekline areas (section 4.7)
- structural modification resulting from past land uses (sections 2.3 and 5.2)
- potential spread of *P. cinnamomi* (section 4.7)
- inappropriate fire regimes (section 4.6), including fire frequency and timing
- damage and fragmentation through management activities, including management of fire and recreation, and through encroachment of adjacent land uses
- drought or other climate change
- changes in natural pollination and recruitment processes through competition between native and introduced pollinators, including European Honey Bees
- extensive areas within the planning area are yet to be surveyed for flora
- grazing by introduced and native species, which is likely to have most impact on the creekline and valley areas that make up a

small but significant proportion of the planning area.

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 key element of the strategy and a major focus of the research program is a landscape-scale experiment to examine changes in forest structure, flora and fauna in response to ecological thinning. The experiment has been established at four Box-Ironbark parks and reserves outside the planning area. The broader application of ecological thinning in other Box-Ironbark areas will be investigated at the conclusion of the trial in seven to ten years.

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

Aims

- Protect indigenous flora and vegetation communities, particularly threatened species.

- Restore vegetation to a more natural age class distribution, structure and floristic diversity over the long-term, consistent with the protection of cultural landscape values.
- Improve knowledge of significant flora and threatening processes to improve management, protection and appreciation.

Management strategies

- *Implement priority actions from approved action statements or recovery plans under the provisions of the Flora and Fauna Guarantee (FFG) and Environment Protection and Biodiversity Conservation (EPBC) Acts.*
- *Allow vegetation communities modified by past mining, forestry and other resource extraction activities to evolve naturally (section 5.2).*
- *Restore understorey species recruitment, diversity and cover through prescribed burning (section 4.6) and pest management (section 4.7) where appropriate.*
- *Protect vegetation from weed invasion and competition, particularly in the Creekline Grassy Woodland and Alluvial Terraces Herb-rich Woodland EVCs (section 4.7).*
- *Protect vegetation and soil from *P. cinnamomi* (section 4.7).*
- *Reflect Indigenous knowledge of vegetation in management practices as appropriate.*
- *Respect the cultural obligations of Traditional Owners in relation to plants and their significance in all management and visitor activities (section 5.1).*
- *Refine flora and vegetation management practices according to the latest research and monitoring findings, consistent with prescribed burn requirements, the protection of cultural values and in accordance with the Box–Ironbark ecological management strategy.*
- *Manage visitor activities to minimise impacts on flora and vegetation communities (chapter 6).*

- *Encourage adjacent land managers, interested community groups and agencies to complement conservation management activities in the planning area by conserving and restoring links between blocks of native vegetation on the land they manage (sections 4.3, 7.4 and 8.3).*
- *Encourage and coordinate surveys and research into:*
 - *threatened flora and EVCs to improve knowledge of their distribution, management requirements and viable population levels for threatened species (sections 8.2 and 8.3)*
 - *grazing impacts on Creekline Grassy Woodland, Alluvial Terraces Herb-rich Woodland, Metamorphic Slopes Shrubby Woodland and significant threatened species, and implement control measures as appropriate (sections 4.7, 8.2 and 8.3)*
 - *Indigenous knowledge relating to vegetation or flora species and management, including harvesting practices (sections 5.1, 8.2 and 8.3).*

4.5 Fauna

The planning area supports at least 186 native fauna species (DSE 2006a), excluding invertebrate fauna for which information is not recorded. Twenty-six threatened fauna species are currently recorded in the planning area (appendix 4), including the Regent Honeyeater, Swift Parrot, Powerful Owl, Squirrel Glider, Brush-tailed Phascogale, Common Dunnart and Bibron's Toadlet. Eight species belonging to the Victorian temperate-woodland bird community listed under the Flora and Fauna Guarantee Act have been recorded in the planning area (appendix 4). A number of other threatened fauna are thought to be present in the planning area, but an adequate survey for these species is yet to be undertaken. Suitable habitat exists in the planning area for threatened reptile species, including the Pink-tailed Worm Lizard, Woodland Blind Snake and Bandy Bandy (P. Johnson pers. comm.).

The lower parts of valleys and the creekline areas include particularly important habitat for native fauna and are dominated by Creekline Grassy Woodland and Alluvial Terraces Herb-

rich Woodland vegetation (section 4.4). The structure of vegetation in these areas is in a more natural state than in other vegetation communities of the planning area, having a higher proportion of large old trees, hollows and woody debris on the ground. In addition, the open woodland vegetation structure, abundant nectar supply (particularly from Yellow Gums), peeling bark and grassy ground layer attract important woodland birds, including the Swift Parrot, Regent Honeyeater, Black-chinned Honeyeater, Hooded Robin and Diamond Firetail. There is an isolated population of Crested Bellbirds (a species associated with woodland) in the planning area. This population is one of the most south-easterly occurrences of the species (Schodde & Mason 1999, Parks Victoria 2003a).

Large old trees are uncommon or absent over most of the planning area in Box–Ironbark Forest and Heathy Dry Forest communities. Large old ‘cull trees’ (sections 2.3 and 5.2) are therefore important habitat in these areas, although the stability of these trees is decreasing over time, and there are few trees of large enough diameter to replace the habitat lost as these cull trees fall and decay.

The ECC (2001) recognised nine large old tree sites in the planning area, totalling 1700 hectares. Threatened species that are dependent on habitat containing large trees and hollows include the Squirrel Glider, Powerful Owl, Brush-tailed Phascogale, Brown Treecreeper, Square-tailed Kite and Tree Goanna.

There are also 11 fauna refuges totalling approximately 330 hectares in the planning area (Robinson & Rowley 1994). These refuges are located largely in the lower valleys and creeklines and provide refuge for fauna in times of drought or fire. These areas are also important areas favoured by mammals for reproduction. The most significant of these fauna refuges is along Spring Creek. The planning area also hosts five Powerful Owl Management Areas, totalling approximately 5000 ha (Soderquist 1999). The Powerful Owl Management Areas have been identified through modelling techniques, and indicate suitable habitats for the Powerful Owl. As yet no Powerful Owl breeding sites have been recorded in the planning area. Powerful Owls reproduce over the winter and human disturbance during this period limits the

success of reproduction. Barking Owls have been recorded near the planning area and have similar requirements to Powerful Owls. There is one Swift Parrot priority site (approx. 50 ha) in the planning area, north of Graytown along Spring Creek. This site is also recognised as a fauna refuge and large old tree area.

Populations of Brush-tailed Phascogale are found throughout the planning area, and are most common around Mount Black. The whole of the planning area, together with the adjacent State forest areas, are a priority management area for this species (P. Johnson pers. comm.). They are reliant on larger diameter and hollow-bearing rough-barked eucalypts (Red Ironbark and Brown Stringybark) and favour areas with these vegetation characteristics that are in or near the more fertile valley areas (S. Dashper pers. comm.).

Woody debris on the ground is deficient over the whole planning area, particularly in Box–Ironbark Forest, as these areas were the most accessible for historic timber harvesting and firewood collection (sections 2.3 and 5.2). The loss of coarse woody debris from Victoria’s forests and woodlands is listed as a potentially threatening process under the *Flora and Fauna Guarantee Act 1988* (SAC 2003).

The large number of dams in the planning area (section 4.6) may help support increased numbers of native and introduced fauna that would not have occurred naturally in the planning area.

Threats to fauna in the planning area include:

- inadequate knowledge of ecosystem functions and species requirements
- predation by introduced pest animals, including foxes and cats
- inappropriate fire regimes (section 4.6), including fire frequency and timing
- damage and fragmentation of habitat through park management activities, including management of fire and recreation, and through encroachment of adjacent land uses
- drought or other climate change
- competition for nectar resources between native and introduced pollinators, including European honey bees

- occupation of hollows by European honey bees
- reduced food resources and habitat through competitive grazing, weed invasion and competition, *P. cinnamomi* and structural modification resulting from past land uses (sections 2.3, 4.7 and 5.2).

Aims

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

Management strategies

- *Implement priority actions from approved action statements or recovery plans under the provisions of the FFG and EPBC Acts.*
- *Protect significant fauna from predation by implementing pest animal control programs (section 4.7)*
- *Protect fauna habitat from damage by fire, particularly the Special Protection Area – Fauna Refuge, large old trees and large old Grey Grass Trees, hollow trees, coppice bases and woody debris on the ground (section 4.6).*
- *Manage visitor activities to minimise impacts on fauna (chapter 6). In particular, regulate or exclude large events from the Special Protection Area – Fauna Refuge during spring (sections 6.9 and 7.3).*
- *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.*
- *Encourage managers of adjacent land, interested community groups and agencies to complement fauna habitat in the planning area by conserving and restoring links between blocks of native vegetation on the land they manage (sections 4.3, 7.4, 8.2 and 8.3).*
- *Encourage and coordinate surveys and research into:*

- *significant fauna to improve knowledge of their distribution, management requirements and population levels for threatened species (sections 8.2 and 8.3)*
- *Indigenous knowledge relating to fauna (sections 5.1, 8.2 and 8.3)*
- *identification of Powerful Owl and Barking Owl breeding sites within the planning area. If breeding sites are identified, exclude organised events within a 3 km radius of these sites during the winter breeding period (section 7.3).*

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 *North West Region, Bendigo Fire District, Fire Protection Plan* (DSE 2003b), the *Code of Practice for Fire Management on Public Land* (DSE 2006c) 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.

Under the *North West Region, Bendigo Fire District, Fire Protection Plan* (DSE 2003b), most of the planning area is categorised as Zone 3 to be managed as a Broad Area Fuel Reduced Mosaic. Much of the planning area is afforded greater protection from fires coming from the predominant north-westerly fire risk direction through placement of a Zone 2 – Strategic Fuel reduction corridor of approximately 350 metres width along Plantation Road, Paveys Road, Cherry Tree Track and Scrubby Road. Sections of this fuel reduced strip along Plantation and Paveys Roads are within the planning area. The remainder of this strip is in the Heathcote–Rushworth State Forest along the boundary of the planning area.

The Bendigo Fire District Operations Plan is reviewed annually following public

consultation. It contains a schedule and maps for prescribed burns planned over the following three years.

Research using Grey Grass Trees as an indicator of fire history is being undertaken in the Rushworth State Forest. There is currently insufficient evidence to determine the pre-settlement fire frequency in this area (M. Bellette pers. comm.). The results of this research, when available, may be indicative of the pre-settlement fire history of the planning area. Post-settlement, the fire regime in the planning area is largely unrecorded. Before World War 2 there would have been some burning throughout the planning area, with the requirement that hewers burn the tree crowns and leaf litter prior to the fire season (M. Bellette pers. comm.). Apart from this, however, fire exclusion was the predominant historic fire regime throughout the planning area.

A large fire in about 1843 burnt most of the then Rushworth forest. Parts of the planning area may also have been burnt at this time. In January 1862, a 'time of tremendous heat and bushfires' (Randell 1985), a bushfire crossed the Mount Ida Range and threatened the Chinese Camp near the Heathcote showground.

Grey Grass Tree recruitment events also suggest that fires occurred in the forests to the south of Rushworth in about 1902 and 1939 (M. Bellette pers. comm.). Fires may also have occurred in the planning area at these times.

The fire history recorded for the planning area since 1980 indicates that 93% of the planning area is long unburnt. One wildfire in 1987 burnt the northern sections of the McIvor Range and the southern sections of the Mount Ida Range, a total area of 4000 hectares including 554 hectares within the planning area, predominantly carrying Heathy Dry Forest EVC. Since 1982 various small prescribed burns have been undertaken for fuel reduction purposes within the Zone 2 corridor, totalling 341 hectares.

Fire is an important influence and a potential management tool in maintaining the diversity of the park's vegetation. The burning required to maintain the ecosystems within the planning area has yet to be determined.

Potential environmental impacts resulting from inappropriate fire regimes vary, depending on fire frequency and timing. Too-frequent burning, or burning close to the peak fire period, may result in decreases in leaf litter, loss of hollows and woody debris from the forest floor, loss of topsoil, decreased population sizes of susceptible fauna species, fragmentation of populations of some species, temporary loss of canopy, and changes in species diversity resulting in a greater cover and abundance of shorter-lived fire-dependent species. Too infrequent burning can result in a build up of fine fuels, which in the long-term may increase the fire hazard and intensity of a wildfire if it occurs. Conversely, infrequent burning can increase the cover and abundance of longer-lived and fire-sensitive species and decrease the recruitment of species that are dependent on fire disturbance. The timing of fires can also impact on fauna breeding, flora recruitment, and authorised uses such as apiculture.

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.

Values in the planning area to be protected from fire include vegetation important for fauna refuge, scenic amenity or regenerating fauna habitat, individual or groups of large old Grey Grass Trees, large old eucalypt (particularly those with hollows), and coppice bases and woody debris on the ground. Special Protection Area overlays will protect fauna refuge areas, large old trees and large old Grey Grass Trees (section 3.3).

Crimson Spider-orchid and Clover Glycine require protection from fire and fire management activities. Populations of Scented Bush-pea (threatened) may not regenerate adequately after fire if the fires are too frequent.

Fire management activities, particularly works and vehicle movements that disturb drainage lines or transport soil, may also pose a threat to the spread of *P. cinnamomi* (section 4.7).

Certain cultural heritage places (particularly those that contain combustible elements) also need protection from fire.

There are many dams throughout the planning area that were established variously for mining, grazing stock or fire protection purposes. These dams alter natural flow regimes (section 4.3) and provide artificial water sources for both pests and native fauna (section 4.5), and may exceed the requirements for fire protection purposes.

The planning area is used each year for aircraft fire training activities because of its proximity to Mangalore airport. This involves water-bombing in designated areas, under strict safety and environmental regulation.

Aims

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

Management strategies

- *Implement fire management works in accordance with the North West Region (Bendigo Fire District) Fire Protection Plan and the Code of Practice for Fire Management on Public Land.*
- *In partnership with DSE, prepare a fire management plan for the area including the planning area, including prescribed burning plans, that integrates DSE fire protection plan, and cultural heritage and ecological management, requirements. Seek the updating of DSE fire management plans to reflect ecological management requirements as appropriate.*
- *Ensure that the park's natural and cultural values are taken into account in the planning and implementation of fire protection/ management plans. In particular:*
 - *protect the Special Protection Area – Fauna Refuge from damage by fire, and wherever possible exclude fire from these areas*
 - *protect Crimson Spider-orchid and Clover Glycine populations from fire and fire management activities*
 - *consider specific fire management requirements of threatened species,*

including fire frequency requirements for the Scented Bush-pea

- *protect significant fauna habitats throughout the planning area from damage by fire, including large old trees, large old Grey Grass Trees, hollow trees, coppice bases and woody debris on the ground*
- *for the Special Protection Area – Large Old Trees, include provisions in the fire management and fire protection plans for the protection of large old trees and large old Grey Grass Trees from damage by prescribed fires*
- *survey cultural places and objects that contain combustible elements, and seek advice from Heritage Victoria, AAV and the relevant Registered Aboriginal Party on protection requirements to be included in fire management plans.*
- *Ensure that 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 Traditional Owners.*
- *Assess the need for dams for fire protection purposes, including consideration of natural and heritage values associated with the dams, in collaboration with DSE. Drain and rehabilitate any dams that are no longer required, and map and signpost all remaining fire dams.*
- *Ensure that authorised park users, including apiarists, are notified of prescribed burning activities that may impact on their activities.*

4.7 Pest plants and animals, and diseases

Pest plants

There are 105 introduced flora species recorded in the planning area (DSE 2006b).

The majority of the planning area (97%) is covered by Box–Ironbark and Heathy Dry Forest EVCs, which are on the upland hills, rises and ridges. They are relatively weed-free because the dry conditions are unsuitable for most introduced weeds.

The lower slopes of valleys and creekline areas, which support Creekline Grassy Woodland and Alluvial Terraces Herb-rich Woodland EVCs, have higher levels of soil fertility and water availability than other areas (section 4.4), and are more susceptible to invasion by pest plants which can out-compete some of the indigenous flora species in these areas. In addition, these areas have been the most heavily disturbed by native and introduced species grazing and, in places, historical alluvial gold mining, allowing the introduction and spread of weeds (section 2.3). Pest plants also grow along roads and other disturbed areas.

Competition from pest plants has the potential to impact on threatened flora and fauna by changing species composition, and reducing the diversity, abundance and cover of threatened flora, and altering essential habitat for susceptible fauna. Species considered at risk from weed competition include Clover Glycine as well as some invertebrates, reptiles, frogs and ground-foraging mammals and birds.

The weed cover in the different EVCs within the planning area was assessed in spring 2004 using the Habitat Hectares methodology (Parks Victoria 2005b). The main weeds of concern recorded were Paterson's Curse, Horehound, St John's Wort, African Feathergrass, Sweet Briar, Bathurst Burr and Scotch Thistle.

Under the *Catchment and Land Protection Act 1994* (Vic.), Paterson's Curse, Bathurst Burr and St John's Wort are considered to be regionally controlled weeds for both the NCCMA and GBCMA regions (GBCMA 2004; State of Victoria 2003). The European Olive is listed as an emerging future environmental weed in the NCCMA region (State of Victoria 2003). Its seeds are spread by foxes and birds, and it may flourish in waterways.

Several species of non-indigenous native plants and introduced plants have been planted around the Dargile Picnic area. These trees and the associated stories behind their plantings

have cultural heritage value (sections 2.3, 4.1 and 5.2). The continued spread of some of these species, in particular Cootamundra Wattle and Early Black Wattle, pose a threat to the natural values of the area, and should a wildfire pass through the area several of these non-indigenous native plants would be expected to have vigorous regeneration.

Horehound is known to colonise and thrive on Aboriginal earthen mounds (R. Johnston pers. comm.).

Pest animals

Eleven introduced fauna species have been recorded in the planning area (DSE 2006a and local sources). Several native fauna are adversely affected by predation by pest animals, particularly foxes, cats and wild dogs. Ground-foraging fauna, including reptiles and frogs, are considered most threatened by these pest animals. Threatened species in the planning area that are at risk from fox predation include the Bush Stone-curlew and the Common Dunnart, which are considered to have a high risk of predation, and the Brush-tailed Phascogale, which has a medium risk (Robley & Choquenot 2002). Other predatory animals recorded in the planning area include the Black Rat, House Mouse and Feral Pig.

Overgrazing by both native and introduced species can reduce the cover and diversity of native understorey species and in the longer term impact on the species composition of the overstorey through lack of recruitment (section 4.4). Introduced grazers and browsers such as rabbits, goats and pigs can pose threats to particular flora species, such as Crimson Spider-orchid and Clover Glycine. Other species may also be affected by a reduction of essential ground habitat and competition for resources.

There is a population of about 20 goats in the planning area, but population numbers could expand rapidly given favourable conditions for the species. Goats are seen most often in the higher areas around Mount Ida, which is Heathy Dry Forest, but have an extensive range, including adjacent farmland and State forest.

Parks Victoria's statewide risk assessment of rabbit impacts indicate that Metamorphic Slopes Shrubby Woodland is the EVC most susceptible to damage by rabbits in the

planning area, and is of moderate concern. The rocky outcrops and small shrubs and trees in this EVC provide optimum harbour for rabbits, and large rabbit populations can have a heavy impact on the herb layer, which is particularly fragile as the soils are shallow and dry rapidly in late spring (Long et al. 2003). A recent assessment of this EVC showed there was no recent recruitment of woody understorey species (Parks Victoria 2005b). Grazing impacts may be contributing to this lack of understorey recruitment. Other EVCs considered to be adversely affected by rabbits in the planning area, but of less concern, are Alluvial Terraces Herb-rich Woodland and Hills Herb-rich Woodland. These EVCs attract rabbits because of their species-rich ground layer, dominated by perennial grasses and herbs which provide year-round foraging (Long et al. 2003). Rabbits are also known to colonise and thrive on Aboriginal earthen mounds (R. Johnston, pers. comm.) and rabbits or rabbit management activities may therefore pose a threat to Indigenous cultural values. Grazing animals can also act as a vector for weed dispersal, particularly in these EVCs.

Introduced birds recorded in the planning area are the House Sparrow, Common Starling, Common Myna and Common Blackbird. Competition for habitat and resources by the Common Myna and Common Starling are thought to impact on threatened species such as the Regent Honeyeater, Swift Parrot and Black-chinned Honeyeater, and on species that belong to the threatened Victorian temperate-woodland bird community (section 4.5). European Wasps have been seen around the McIvor Creek at Heathcote, but are not presently recorded in the planning area.

The incidence of wild populations of European honey bees has not been assessed in the planning area.

Diseases

Phytophthora cinnamomi is a soil-borne pathogen of plants that is present in the Mount Black area of the park. The extent of infected areas in the planning area and rate of spread are not fully known. This disease has the potential to affect plant species and communities and soil stability. It is listed as a threatening process under the Flora and Fauna Guarantee Act and the Environment Protection and Biodiversity Conservation Act. Grey Grass

Trees, Daphne Heath and Nodding Blue-lily are particularly susceptible and can be used as indicators of the disease's presence. The effect on vegetation is noticeable through 'dieback' and eventual death of the plant, which subsequently affects fauna through loss of habitat and food resources (CEM 2002a). Research in other areas has shown the passive spread of the disease can be up to two metres downslope per year through subsurface and surface water flow (CEM 2002b). The disease is spread by zoospores migrating through soil moisture, or by transport of infected soil or gravel from one site to another, often by human activities. Human activity is the most significant risk in the spread of the disease to new areas, through activities such as road construction and maintenance, fire control works, and recreation (including illegal activities) which disturb soil. Practices to minimise the spread of the disease include:

- isolation of known infestations
- strict hygiene procedures for management vehicles and people entering infected areas, including sterilisation using chlorine-based washes and vehicle wash-down.

Treatment of infected plants (including Grey Grass Trees) and soil with the chemical phosphonate has been trialled elsewhere in Australia to arrest the spread of *P. cinnamomi*. Research into the impacts of the chemical on vegetation is limited, and the cost of broad-scale application of the chemical is currently prohibitive.

Aims

- Control and, where possible, eradicate pest plant and animal species and disease from the park.
- Minimise the impact of control programs on native flora and fauna.

Management strategies

- *Control or eradicate pest plant and animal species. In developing programs, recognise the following as priority threats to the park:*
 - *pest plant infestations and introduced herbivores around populations of Crimson Spider-orchid and Clover Glycine*

- *vigorous new or emerging weeds before they become established*
- *pest animals where their population levels have the potential to rapidly expand given favourable conditions*
- *priority weeds listed under the Catchment and Land Protection Act, particularly Paterson's Curse, Bathurst Burr and St John's Wort*
- *other weeds identified as priorities because of the high risk to significant natural values.*
- *Encourage cooperative projects with managers of adjacent land, other agencies and interested community groups to control pest plants and pest animals where such projects can make significant contributions to maintaining or enhancing values of the planning area and adjacent areas (sections 7.4 and 8.3).*
- *Monitor foxes, rabbits, cats and goats using approved monitoring techniques. Undertake control programs for pest animals to meet annual targets.*
- *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 that all significant pest plant and animal control activities in the planning area are recorded in Parks Victoria's Environmental Information System.*
- *Work with the relevant Registered Aboriginal Party to ensure that Aboriginal places and objects are not adversely affected by management activities such as rabbit control programs.*
- *Destroy wild populations of European Wasps and European honey bees that pose a risk to visitors or threatened species.*
- *Encourage collaborative research into grazing impacts, particularly on Creekline Grassy Woodland, Alluvial Terraces Herb-rich Woodland and Metamorphic Slopes Shrubby Woodland EVCs.*
- *Restore native vegetation in areas where non-indigenous plants have been removed. Around the Dargile area, re-establish indigenous Acacia species and progressively remove the invasive Cootamundra Wattle and Early Black Wattle over several years.*
- *Recognise seedlings originating from historic plantings of exotic and non-indigenous trees as pest plants, and manage as part of pest plant control programs.*
- *Ensure that no recreational activities occur within the Special Management Area – *Phytophthora cinnamomi*, and that any management activities, including research or fire suppression, are conducted only under strict regulation to prevent the spread of the disease.*
- *Prepare and implement a *P. cinnamomi* control strategy for the planning area that considers:*
 - *identifying, recording and monitoring the extent of disease infection*
 - *containing the spread of the disease through management of recreation and fire activities and the application of a Special Management Overlay (section 3.3), and other access restrictions where required*
 - *current research on *P. cinnamomi*, including the use of phosphonate treatment to arrest the spread of the disease where appropriate*
 - *revegetation of sites affected by the disease*
 - *any presence of *P. cinnamomi* on adjacent land, and control measures proposed by the managers of that land.*

5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

5.1 Indigenous cultural heritage

Indigenous tradition indicates that the planning area covers the *Country* of a number of Indigenous groups. Indigenous groups that have interests in the planning areas include the Ngurai-illam Wurrung, Bendigo Dja Dja Wurrung Aboriginal Association Incorporated, Taungurung Clans Aboriginal Corporation and the Yorta Yorta Nations.¹

Indigenous survey in Victoria has rediscovered and recorded isolated artefacts, artefact scatters, scar trees of many types (for canoes, coolamons, shields, shelters, etc.), rock wells, stone arrangements, fireplaces (oven mounds), rock art and other places with sacred meanings.

Most of the planning area is yet to be surveyed for Indigenous places and objects. Members of the Taungurung community have surveyed for Indigenous places and objects over a portion of the planning area in the vicinity of Mount Black. The survey identified Aboriginal sites including an artefact scatter, an isolated artefact and scarred trees of possible Aboriginal origin. Areas in the planning area identified as having moderate to high archaeological potential are drainage lines and creek valleys (Murphy & Dugay-Grist 2005). Management works that require the disturbance of soils or vegetation could damage or disturb unrecorded archaeological sites.

Indigenous trading routes are likely to have passed through the planning area, as Mt Camel (Dja Dja Wurrung *Country*) immediately to the north of Mount Ida and Mount William (Woi Wurrung *Country*) to the south of the planning area (section 4.2) have greenstone axe quarries.

Activities that will threaten the integrity of Aboriginal places or objects include:

- overuse or expansion of existing roads or tracks causing increased levels of soil erosion

¹ There are a number of alternative spellings and pronunciations of Taungurung and Dja Dja Wurrung.

- installation of facilities within areas of known or potential archaeological values
- collection of artefacts by visitors (Murphy & Dugay-Grist 2005).

All Aboriginal 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(s) or where there is no Registered Aboriginal Party, with the Department of Planning and Community Development.

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).

Aim

- Protect Aboriginal cultural heritage from interference or damaging activities.

Management strategies

- *Protect all Aboriginal places and objects from disturbance and damage in partnership with the relevant Registered Aboriginal Party, in cooperation with DVC (section 8.3) and in accordance with:*
 - *relevant legislation including the Aboriginal Heritage Act*
 - *relevant cooperative management agreements*
 - *Parks Victoria's Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002).*
- *Assess annual park and reserve programs to integrate relevant Indigenous practices and avoid harm to Aboriginal cultural heritage, in consultation with the relevant Registered Aboriginal Party (sections 6.2, 6.4 and 8.2).*
- *Maintain confidentiality in respect of Aboriginal places, objects, knowledge, and*

cultural obligations in accordance with the views of the Traditional Owners (sections 6.1 and 8.2).

- *Encourage research into Aboriginal cultural heritage relating to the planning area in collaboration with the relevant Registered Aboriginal Party, in liaison with AAV (section 8.3) and in accordance with the views of the Traditional Owners, particularly survey of drainage lines and creek valleys. Use the results and recommendations of the Mount Black survey (Murphy & Dugay-Grist 2005), and any future research to enhance protection of Indigenous heritage values (section 8.2).*
- *Prevent Aboriginal places and objects along drainage lines and creek valleys from being damaged or covered over as a result of erosion by implementing erosion controls and revegetation works where required (section 4.3).*

5.2 Historic heritage

An oral history project covering the planning area and other forest areas between Heathcote and Rushworth has been undertaken for DSE and Parks Victoria by the Cultural Heritage Unit of The University of Melbourne (Reeves & Chisolm 2006). The project documented interviews with people who have been closely associated with the forests of these areas. Information about the Graytown area and the Graytown Public Cemetery in particular has been compiled by the Trustees of the cemetery (Cochrane 1995). Additional information about the planning area's heritage may become available as further surveys and research are completed and made available for use.

The Trustees of the Graytown Public Cemetery are descendants of those buried at the cemetery (section 8.2) and are responsible for management of this site, which is surrounded by the park. The trustees have advised there may be unmarked burial sites outside the current boundaries of the cemetery.

There are many individuals and groups within the community that wish to maintain their connections to the planning area and be actively involved in its management (section 8.2).

The major historical themes represented by places and landscapes of the planning area are:

- gold mining from the early rushes to the 1970s
- timber production, forest management and other resource extraction and their role in the economic development of Victoria and the region
- global migration and the stories associated with migration of different national groups.

Gold

The two major gold rushes that impacted on the planning area were the McIvor (Heathcote) Rush, commencing in 1853, and the Spring Creek (Graytown) Rush, from 1868 (Randell 1985; Bannear 1997). Several other localities within the park were also worked over for gold at various times until the 1970s. The township of Graytown was surveyed in November 1868, and by the following January there were at least 20 000 people on this goldfield (Randell 1985). The *Argus* newspaper reported in 1897 that a flood in 1870 wiped out the mining in this area (Bannear 1993). Heritage places associated with gold mining around the Graytown area include Clarkes Dam, Surface Hill Battery Site, Nardoo Lead Battery and Puddler, and the Graytown school, cemetery and township.

Mount Melville and Melvilles Lookout are said to be named after Captain Melville, the infamous bushranger (section 6.1). Several puddlers known as the 'Curly Dog Diggings' group are within the park, near Redcastle. A recently discovered puddling machine in this locality is in good condition, well formed, with intact lining boards, central pivot post and surrounding tailings dumps. There are also remains of substantial stone fireplaces in these places, evidence of occupation over an extended period. These mining heritage places are close to others in the adjacent State forest.

The Heathcote Powder Magazine is a substantial building from the gold mining era. It is listed on the Victorian Heritage Register and the Register of the National Estate, and is of statewide heritage significance. It was constructed in 1864 by the Public Works Department, using locally quarried stone. The massive masonry of the building, including

brick vaulting and baffled air vents, are distinctive features of the building. At the time it was built, it was thought that this imposing structure would help contain explosions. The building is an important and interesting artefact of the colonial government's contribution to the activities of miners on the McIvor goldfields.

Timber and other resources

Demand for timber, mostly for construction and fuel, rose rapidly throughout the goldfields areas from the time of the first gold rushes in Victoria. Places containing evidence of forestry activities and the regenerating Box–Ironbark forests and woodlands are important historical records of the role that the timber industry, and the government agencies that have managed these areas, have played in the economic development of Victoria. Timber from the planning area and surrounding forests was used to build railways and supply electricity and telephone services. The planning area also supplied important fuel resources during World War 1 and World War 2, as evidenced by charcoal-burning pits and cleared areas near dams that were used as forestry camps from the 1890s (Carver 1894, cited in Bannear 1997). During the economic depression of the 1930s, young unemployed men were recruited to thin the dense coppiced forest, mostly supplying firewood. These men lived in forest camps, and the work was often referred to as 'susso work' and the camps were called 'susso camps'.

The Dargile area was cleared and tree plantations were established during World War 1 (FCV undated). The plantation timbers were largely used as a resource during World War 2 (Hall 1985a). Exotic and non-indigenous native species are still present around the Dargile area.

The landscape of the planning area reflects its history of intensive timber utilisation and management. The areas of the Box–Ironbark Forest EVC in particular contain many multi-stemmed (coppice) trees growing closely spaced together. The original large tree stumps, now decomposing, can often still be seen at the centre of a cluster of coppice stems. Scattered 'cull trees' are also evident throughout parts of the planning area (section 4.1). These large old and defective trees were ringbarked in the 1920s and 1930s (Hall

1985a) as they were not suitable as sawlogs, allowing nearby suppressed smaller trees with good form to be 'released' and grow faster.

The quarry at Mount Black supplied granite blocks that were hauled 24 km by bullock dray and used in the construction of the Goulburn Weir from 1887 to 1891 (GMW 2005). Gravel for road building has also been extracted from within the planning area.

Migration

Several heritage places have potential value as resources to facilitate the telling of stories associated with the several groups of migrants that lived and worked in the planning area.

Many Italian migrants arrived in the region and worked in the timber industry within the planning area and surrounds, beginning in the 1920s (Hall 1985b).

During World War 2, Italian and German prisoners were held at Graytown in the prisoner of war (POW) camp, established in 1941. The prisoners worked at cutting wood in the forest and growing vegetables in the fenced compound, where they were held under armed guard at night (Gilmore in Bannear 1997). The archaeological remains concealed in this landscape, together with stories of the inmates, provide a wealth of detail about the daily life and interaction with the guards (Reeves 2006). Stories of inmates at Tatura, Rushworth and Murchison are included in Joyce Hammond's book *Walls of Wire* (Hammond 1990), and in some of the oral histories recorded as part of the oral histories project (Reeves & Chisolm 2006). After the war the POW site was used as an immigrant camp or 'Balt' camp (as many of the immigrants came from the Baltic states). The immigrants were required to work in the forest for two years to complete their Government contracts (Bannear 1997).

There was a large Chinese population around Heathcote during the McIvor Rush, and an influx of Chinese to the area following the Buckland Riots of 1857, bringing the local Chinese population to between 2000 and 3000 (Randell 1985). As elsewhere on the Australian goldfields, there was enormous prejudice against them (Randell 1985).

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

for *Places of Cultural Significance* (the 'Burra Charter') (Australia ICOMOS 1999) and *Parks Victoria's Heritage Management Strategy* (Parks Victoria 2003b).

The Conservation Management Plan for the Heathcote Powder Magazine and the draft *Heritage Action Plan* (Reeves 2006) for the planning area contain detailed guidelines for the conservation and management of the heritage values of the planning area. These plans have been used in developing the following management strategies for the planning area.

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 planning area and to be actively involved in their management.

Management strategies

- *Document heritage values and record the information in Parks Victoria's information systems.*
 - *Complete and implement a Heritage Action Plan for the Heathcote Powder Magazine incorporating clarification of its future management direction and review of the conservation management plan.*
 - *Allow cultural landscapes modified by mining, forestry and other resource extraction to evolve naturally (section 4.1).*
 - *Protect unmarked burial sites outside the current boundary of the Graytown Public Cemetery through a Special Management Area – Heritage overlay, where recreational activities that disturb soil are excluded and where heritage advice must be sought prior to conducting management activities in the area that may disturb soil (sections 3.3 and 6.10).*
 - *Consult with the Trustees of the Graytown Public Cemetery in relation to the management of park areas surrounding the cemetery (section 8.2).*
 - *Regularly monitor and manage the following heritage sites to provide for low-impact discovery experiences by visitors,*
- while maintaining cultural values: Heathcote Powder Magazine, Graytown Township, Graytown POW and immigrant camps, Mount Black Quarry, Graytown Forestry Camp, Baileston Track charcoal pits, Curly Dog Reef workings, mine sites and puddlers. At these sites undertake visitor management works as necessary, including to:*
- *restrict vehicular access and formalise parking areas*
 - *formalise walking tracks*
 - *provide limited directional, place and self-guide information and signage*
 - *site protection, stabilisation or other conservation works at the Heathcote Powder Magazine and Graytown sites*
 - *pest control (section 4.7).*
- *Protect non-indigenous plants that contribute to the cultural heritage significance of places within the planning area, particularly the historic Dargile plantation, while removing self-seeding wildlings and invasive weeds as part of annual pest plant programs (section 4.7).*
 - *Support projects initiated by interested groups that aim to increase understanding and appreciation of the heritage values of the planning area in the wider community, particularly regional tourism heritage and interpretation projects that involve sites inside the planning area and other nearby sites, including Whroo Historic Area, internment camps at Murchison East, Tait–Hamilton Rd and Pink Cliffs (section 6.1 and table 3).*
 - *Consider community perspectives and opinion in determining appropriate interpretation of the planning area's heritage values.*
 - *Use oral history interviews to understand the value of places to the local community, to identify ways for the community to become involved in the management of the planning area, and to prepare materials for publication and interpretation (sections 6.1 and 8.2).*
 - *Record, research and retain historic names for places in the planning area.*

- *Encourage research into social history, technological change, past land uses and their impact on the environment or significance of particular heritage places and values, and consider any new information provided in the management of the planning area's heritage values.*
- *Identify and provide training for key Parks Victoria staff in archaeological site management, including authorisation and training under the Heritage Act.*
- *Develop and implement an induction program on the cultural heritage values of the planning area for staff, interested community, licensed tour operators and contractors to enhance their interpretation and protection (section 6.1).*

6 STRATEGIES FOR VISITORS

6.1 Information, interpretation and education

Providing information, interpretation and education services can help orientate and inform visitors, foster an understanding and appreciation of the planning area's special natural and cultural values, build understanding of management activities and help visitors to experience, understand and appreciate the planning area 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.

Heathcote–Graytown National Park and Spring Creek NCR could become a valuable complement to existing regional tourism products. The planning area is on the outer edge of three tourism marketing regions but is not a prominent feature in recent Regional Tourism Development Plans (Tourism Victoria 2004). The Goldfields product region is most closely aligned with the tourism values offered by the planning area.

Pre-visit information about the park is provided on Parks Victoria's website, and in Park Notes available at the Parks Victoria Bendigo office and Visitor Information Centres at Heathcote, Nagambie and Bendigo.

Orientation and regulatory information, including signage, is currently inadequate throughout the planning area. Information and signage is needed to inform visitors of the different roles of, and regulations applying to, the park and reserve, and the required behaviour and restrictions applying, particularly those for preventing the spread of *P. cinnamomi*.

There are various potential interpretive themes for the planning area. Significant natural and cultural features and landscapes provide places to tell the stories of people and their associations with the planning area, and the planning area's role in the development of Victoria. Existing interpretive facilities and

activities are low-key. They include an information board at the Dargile Picnic Area and occasional Ranger talks with interested groups. The documented oral histories of people historically associated with the planning area and surrounding forest (section 5.2) can be used in preparing interpretive materials (Reeves & Chisolm 2006).

There are opportunities for greater use of the planning area by licensed tourism operators. The development of appropriate signage and provision of relevant information, particularly for interpretive tours through the planning area, should involve interested groups, including relevant Indigenous communities, local government, local and regional tourism industry, the education sector and DSE. Places and landscapes in the planning area with high interpretive potential are listed in table 3. The places and topics suggested may cover one or more interpretive themes, including gold mining, timber and other resource extraction, war-time activities (prisoners of war), migration, natural values and interactions between communities and landscapes.

The planning area has been used over the past 10 years for education, and many sites throughout the planning area are used for field activities as part of the annual Box–Ironbark Ecology Course run by DSE in partnership with other agencies. Features of the planning area that make it suitable for education include its significant exposures of geological features and landforms, vantage points, vegetation and fauna communities, and proximity to other regional environmental features and towns providing essential services. These features also allow local and regional schools and universities to increasingly use the planning area for education. Parks Victoria, DSE and the NCCMA have developed a Box–Ironbark Education Kit for use by primary and secondary schools and by community groups. Tertiary students, particularly from Latrobe University Bendigo Campus and Bendigo Regional Institute of TAFE, use the planning area for field-based studies and projects. Collaborative projects between tertiary institutions and Parks Victoria in developing educational and interpretive materials can

benefit the organisations and the wider community.

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.
- Encourage public support for parks and park management practices.

Management strategies

- *Provide pre-visit information about the planning area through:*
 - *Park Notes*
 - *Parks Victoria's website*
 - *displays or materials at the Heathcote, Nagambie and Bendigo Tourism Visitor Information Centres.*
- *Provide interpretive services and materials primarily at the Dargile site and Graytown sites in accordance with the themes outlined in table 3.*
- *Work with regional and statewide tourism agencies and local governments to ensure that the park is appropriately represented in regional tourism strategies, particularly in the Goldfields tourism product region (section 8.3).*
- *Maintain appropriate levels of directional signage within the planning area, and work with other road managers to ensure that there is appropriate signage in their areas of responsibility (section 6.2 and table 4).*
- *Provide and maintain information about P. cinnamomi, particularly signage along Mount Black Quarry Road.*
- *Maintain the information board at Dargile visitor site.*
- *Encourage ongoing sustainable use of the planning area for education and promote the Box–Ironbark Education Kit as a resource for use in local and regional schools.*
- *Encourage and support educational and interpretive projects initiated by interested*

groups that are consistent with the planned interpretive themes (table 3) and increase community support for the planning area and appreciation of its values. In particular, encourage the development of:

- *an interpretive guide or leaflet for a walking trail between the Mount Ida lookout and Dargile visitor site*
- *an interpretive cultural heritage trail including relevant places and landscapes in the planning area and surrounding region (section 5.2).*
- *Work collaboratively with groups that develop interpretive materials relating to the planning area to ensure there is appropriate acknowledgement of the Traditional Owners, erection and maintenance of appropriate directional, place and self-guide information and signage, and management of visitor impacts in the planning area (section 5.1 and 5.2).*
- *Promote greater public understanding and appreciation of and respect for Indigenous culture by incorporating information about Aboriginal knowledge, places and objects in information, interpretation and education programs, in collaboration with the relevant Registered Aboriginal Party (sections 5.1 and 8.2).*
- *Provide appropriate opportunities and encourage and support Indigenous communities to participate in the interpretation of Aboriginal cultural heritage relating to the park, with the agreement of the Traditional Owners (section 8.2).*
- *Host visits to the planning area for regional tourism stakeholders, including licensed tour operators, to familiarise them with the area's opportunities, and explore the role the Heathcote–Graytown National Park can play in complementing regional tourism products and experiences (section 6.11).*
- *Provide opportunities for licensed tourism operators to attend information, interpretation and education training sessions hosted by Parks Victoria.*

TABLE 3 INTERPRETIVE THEMES

PLACE	TOPICS FOR INTERPRETATION
Big Old Grey Grass Trees	Natural landscape Indigenous occupation Management of vegetation that has impacted on the natural landscape
Curly Dog: reef workings, mine sites and puddlers	Mining approaches in different mining eras
Dargile*	Changes in land uses over time Changes in community needs and attitudes to the environment Box–Ironbark flora and fauna
Darrocks Rd, Scrubby Tk, Four Mile Rd	Seasonal flora drive: especially noted for Goldfields Boronia and Whirrakee Wattle
Graytown	Social history of the region Spring Creek (Graytown) gold rush Day-to-day lives of the diggers
Graytown Forestry Camp*	Role of timber industry in development of Victoria, forest work
Baileston charcoal kilns & forestry landscapes	Government employment initiatives, from ‘susso’ work to Green Corps and REEP
Graytown POW camp, immigrant camp	Migration – gold rush, POWs, post-WW2 migration Changes in attitudes to migrants
Heathcote Powder Magazine	Indigenous occupation prior to settlement Gold rush and colonial governance
Melvilles Lookout	Goldfields mythology – bushrangers , e.g. Captain Melville Cultural landscape – Interactions between humans and the environment
Mount Black Quarry	Resource extraction for building the Goulburn weir.
Mount Ida	Geology, landscape, gold formation (e.g. link geology to the region’s unique Shiraz) Indigenous trading routes
Spring Creek / Graytown landscape	Box–Ironbark flora and fauna Large old trees, fauna refuges

* Denotes sites where Parks Victoria will provide interpretive services and/or materials.

- *Inform visitors of the different roles of, and regulations applying to, the park and reserve, and the behaviours that are appropriate to conserve and protect cultural and natural values, and maximise visitor safety. Encourage visitors to adopt minimal impact techniques, and to adhere to the relevant regulations and codes of conduct appropriate to their activity.*
- *Regularly evaluate information and interpretive programs related to the planning area.*

6.2 Vehicle access

The planning area has an extensive road network, both formed and unformed, that has been used historically for mineral and timber extraction. Major roads are in good condition, whereas tracks that are long unused and duplicate other routes are generally overgrown and difficult to discern on the ground. These latter tracks are no longer required for visitor use or management purposes. Allowing these unnecessary tracks to continue to grow over will substantially decrease the levels of

vegetation fragmentation within the planning area. The current average density of track is 11.6 metres per hectare in the park (University of Ballarat 2005).

The main vehicle access routes to the planning area are the Northern Highway and the Heathcote–Nagambie Road. Most minor access roads to the planning area stem from the Heathcote–Nagambie Road. The Dargile camping and picnic area is accessed via the Heathcote – North Costerfield Road, then Plantation Road and Plantation Track. A scenic viewpoint over the Heathcote valley at Viewing Rock can be reached by vehicle via Range Drive, or via a popular short walk from the Heathcote Powder Magazine.

Table 4 lists the roads within and adjacent to the planning area that exist and will be maintained for vehicular access.

P. cinnamomi has already been confirmed in the planning area at Mount Black and may be detected elsewhere in the planning area in the future (section 4.7). Human activities present the highest risk in the spread of the disease to new sites.

The Graytown 1 : 25 000 map is currently out of print. Updated information on the managed road network could be included on this map when it is reprinted.

The road network within the planning area is used by visitors and for management purposes. Roads open for public use are those designated as 2WD or 4WD in table 4. These roads are used by visitors for car touring, four wheel driving, trail-bike riding and scenic viewing. Parks Victoria works with Four Wheel Drive Victoria to encourage safe and responsible four wheel driving in park and reserve areas, and operates within the framework of a memorandum of cooperation between the organisations. Car rallies approved by the Confederation of Australian Motor Sports are occasionally held in the State forest area, on roads adjacent to the park.

All roads listed in table 4 are available for use by management vehicles, including emergency services vehicles. Roads designated for use by management vehicles only are not available for use by public motor vehicles, except with appropriate authorisation. These ‘management vehicle only’ roads are generally also available

for other uses, including cycling and walking (table 4).

Off-road driving or riding is not permitted in the planning area. Off-road riding and driving damages vegetation and soil, causing habitat fragmentation, soil erosion and compaction, and contamination of waterways. It damages and degrades planning area values and the enjoyment and amenity of other visitors.

Aims

- Provide and maintain a sustainable network of motor vehicle roads appropriate for visitor use and management.
- Minimise the impact of road and track management on the planning area’s values.

Management strategies

- *Manage and maintain roads for motor vehicles in accordance with table 4 and figure 3. Unformed tracks not shown in table 4 will not be maintained for vehicular access. Where necessary, to prevent the spread of *P. cinnamomi* additional access restrictions may be imposed.*
- *Maintain appropriate signage on all vehicle access roads (section 6.1).*
- *Provide updated information on the managed road network within the planning area to emergency services and statewide road database systems.*
- *Ensure that road maintenance works do not damage natural or cultural values by:*
 - *ensuring road maintenance is conducted in a manner that will not increase the amount of road verge impacted over time (sections 4.1-4.6, 5.1 and 5.2)*
 - *ensuring that all machinery hygiene practices are consistent with the *P. cinnamomi* Control Strategy for the planning area when this is developed (section 4.7).*
- *Work with DSE, Strathbogie Shire and City of Greater Bendigo to ensure that works on roads in the planning area under their control is compatible with the protection of values, particularly in relation to machinery hygiene.*

TABLE 4 MANAGEMENT OF ACCESS ROADS

ROAD / TRACK	CURRENT CLASSIF'N AND USE	PLANNED CLASSIF'N AND USE	ACTIONS/ COMMENTS
MANAGED BY PARKS VICTORIA			
Baileston Rd	5D, All	5D, All	Road for visitor or management access.
Cahills Tk	5E, M4, Dog	5E, M4, Dog	Road for visitor or management access.
Costerfield–Redcastle Rd	5C, All	5C, All	Section through park for 6 km to Tolshers Tk. Other sections managed by DSE and Strathbogie Council. Road for visitor or management access.
Damper Dam Tk	5E, All	5D, All	Road for visitor or management access.
Damper Gully Tk	5D, All	5D, All	Road for visitor or management access.
Dargile Tk	5E, M4	5E, M4	Road for visitor or management access.
Darrochs Rd	5D, All	5D, All	Road for visitor or management access.
Dicks Dam Tk	5E, All	5E, All	Road for visitor or management access.
Four Mile Rd	5D, All	5D, All	Road for visitor or management access.
Freisland Hill Rd	5D, All	5D, All	Road for visitor or management access.
Gormans Tk	5E, MV, Dog	5E, MV, Dog	Road for visitor or management access.
[Graytown–Cemetery Rd]	5E, MV	5E, MV	Road for visitor or management access.
Hylands Tk	5E, MV, Dog	5E, MV, Dog	Road for visitor or management access.
Jim Tk	5E, All	5D, All	Road for visitor or management access.
Johnstons Reef Rd	5D, All	5D, All	Road for visitor or management access.
Lang Tk	5E, All	5D, All	Road for visitor or management access.
Mansbridge Tk	5E, All	5E, All	Road for visitor or management access.
Manseys Tk	5E, MV, Dog	5E, MV, Dog	Road for visitor or management access.
McCarthy Tk	5E, All	5D, All	Road for visitor or management access.
McKenzies Tk	5D, All	5D, All	Road for visitor or management access.
Meaker Tk	5D, All	5D, All	Road for visitor or management access.
Mount Melville Rd	5D, All	5D, All	Road for visitor or management access.
Mount Black Quarry Rd	5D, All	5D, All	Road for visitor or management access.
Mount Camel-Graytown Rd	5C, All	4C, All	Section from northern boundary of freehold land inlier to the park, for 2.3 km to Cherry Tree Track intersection. Other sections managed by Greater Bendigo and Strathbogie Councils. Road for park and other access.
Mount Ida Rd	5D, All	5C, All	Road for visitor or management access.
Paddy Tk	5E, MV	5E, MV	Road for visitor or management access.
Pannells Tk	5E, M4, Dog	5E, M4, Dog	Road for visitor or management access.
Range Drive	5C, All, Dog	5C, All, Dog	Section from Heathcote – North Costerfield Rd to Viewing Rock carpark. Road for visitor or management access.
Range Drive	5E, MV, Dog	5E, MV, Dog	Section from Viewing Rock Carpark to Pannells Tk. Road for visitor or management access.

Table 4 (cont'd)

ROAD / TRACK	CURRENT CLASSIF'N AND USE	PLANNED CLASSIF'N AND USE	ACTIONS/ COMMENTS
Rodney Tk	5E, M4	5D, M4	Road for visitor or management access.
Rice Tk	5D, All	5D, All	Road for visitor or management access.
Scrubby Tk	5D, All	5D, All	Road for visitor or management access.
Shippy Tk	5D, All	5D, All	Road for visitor or management access.
[South Mount Ida Tk]	5E, MV	5E, MV	Road for visitor or management access.
Stoney Crossing Tk	5D, All	5D, All	Road for visitor or management access.
Surface Hill Rd	5D, All	5D, All	Road for visitor or management access.
Suzy Tk	5E, All	5D, All	Road for visitor or management access.
Tin Hut Tk	5E, All	5E, All	Road for visitor or management access.
Todds Rd	5E, All	5E, All	Road for visitor or management access.
[Un-named 21] (POW Camp area)	5E, All	5E, All	Traffic management works and formalisation of carpark area required. Detail of road not shown in figure 3. Road for visitor or management access.
[Un-named 1]	5E, MV	5E, MV	Road for visitor or management access.
[Un-named 2]	5E, MV	5E, MV	Road for visitor or management access.
[Un-named 80]	5E, MV	5E, MV	Signs required; inadequate height clearance for horse riding. Road for visitor or management access.
[Un-named 79]	5E, MV	5E, MV	Signs required; inadequate height clearance for horse riding. Road for visitor or management access.
[Un-named 82]	5E, MV	5E, MV	Signs required; inadequate height clearance for horse riding. Road for visitor or management access.
[Un-named 97]	5D, All		Used for through access along Boundary Rd because a section of Boundary Rd is impassable. Road for park and other access.
William Tk	5D, All	5D, All	Road for visitor or management access.
Willyans Rd	5D, All	5D, All	Road for visitor or management access.
MANAGED BY DSE			
Black Gully Tk	5D, All		Road for visitor or management access.
Cherry Tree Rd	5D, All		Adjacent to the park and is the boundary between park and State forest. Road for visitor or management access.
Costerfield–Redcastle Rd	5C, All		Section north of Tolshers Tk. Other sections managed by Parks Victoria and Strathbogie Council. Road for visitor or management access.
Donellys Lane	5D, All		Adjacent to the park and is the boundary between park and State forest. Road for park and other access.
Freisland Rd	5D, All		Adjacent to the park and is the boundary between park and State forest. Road for visitor or management access.
Gleesons Lane	5D, All		Adjacent to the park and is the boundary between park and State forest. Road for visitor or management access.

Table 4 (cont'd)

ROAD / TRACK	CURRENT CLASSIF'N AND USE	PLANNED CLASSIF'N AND USE	ACTIONS/ COMMENTS
Pavey Rd*	5C, All		Section from Old Coach Rd intersection to point where Paveys Rd becomes Cherry Tree Tk, where the road abuts or runs through State forest. Road for park and other access.
Scrubby Tk	5D, All		Adjacent to the park, forming the boundary between park and State forest. Road for visitor or management access.
Tolshers Tk	5D, All		Road for visitor or management access.
MANAGED BY CITY OF GREATER BENDIGO			
Forest Drive	5C, All, Dog		Road for park and other access.
Heathcote – North Costerfield Rd	5C, All		Major road between towns.
Link Tk	5D, All		Boundary between City of Greater Bendigo and Strathbogie Shire. Road for park and other access.
Mt Camel – Graytown Rd	5C, All		Adjacent to the northern boundary of the park at Redcastle. Road for park and other access.
Old Coach Rd	5D, All		Road reserve, boundary between City of Greater Bendigo and Strathbogie Shire.
Pavey Rd*	5C, All		Partially managed by DSE. Road for park and other access.
Plantation Rd	5C, All		Road reserve. Road for park and other access.
Plantation Tk*	5C, All		Road reserve. Road for park and other access.
MANAGED BY SHIRE OF STRATHBOGIE			
Boundary Rd	5E, All		Road reserve, sections of this road are impassable. Road for visitor or management access.
Costerfield–Redcastle Rd	5C, All		Section south of the park. Other sections managed by DSE. Road for visitor or management access.
Gleasons Lane/Tattersalls Tk	5D, All		Runs adjacent to the park, with freehold land on the other side of the road. Road for visitor or management access.
Graytown–Rushworth Rd	5C, All		Major road between towns.
Link Tk	5D, All		Boundary between City of Greater Bendigo and Strathbogie Shire. Road for park and other access.
Old Seymour Rd	5C, All		Road reserve, also known as Mitchellstown–Graytown Rd in the CFA region mapbook. Road for visitor or management access.
Mount Camel – Graytown Rd	4C, All		Section through the park at the Graytown end and beyond towards Mount Camel until the northern boundary of the freehold land inlier to the park, where it then changes to PV management for 2.3 km. Road for park and other access.
Old Coach Rd	5D, All		Road reserve, boundary between City of Greater Bendigo and Strathbogie Shire.
Neilson Rd*	5D, All		Road reserve. Road for visitor or management access.
Rushworth–Graytown Rd	5C, All		Road reserve.

Table 4 (cont'd)

ROAD / TRACK	CURRENT CLASSIF'N AND USE	PLANNED CLASSIF'N AND USE	ACTIONS/ COMMENTS
Spring Creek Rd	5D, All		Road for visitor or management access.
[Un-named 25]*	5E, M2		Road for visitor or management access.

Key

* Roads where further negotiation is required in relation to responsible road authority.

[] Newly named or un-named road or track

Classification :

Use:

- 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.

- All Visitors in 2WD and 4WD motor vehicles, trail-bike riding, horse riding, bike riding and walking
- M4 4WD motor vehicles, trail bike riding, horse riding, bike riding and walking
- MV Management vehicles, bike riding and walking
- Dog Dog walking on road only and dogs to be on leash

- *Continue to work with clubs and peak bodies for motorised recreational activities, and with other agencies, to promote safe and responsible motoring practices in the planning area.*
- *Promote Four Wheel Drive Victoria’s Code of Ethics for the use of 4WD vehicles.*
- *Participate in projects aimed at curtailing illegal off-road trail bike riding in the planning area, in collaboration with Victoria Police, local councils, other agencies and the community.*

6.3 Visitor site activities

The most popular day visit activities in the planning area are picnicking, short walks and scenic viewing. The numerous heritage sites in the planning area could also attract increasing numbers of visitors.

The Dargile visitor site, at the western end of the planning area, is the most popular destination for day visitors and campers. It has mid-level facilities including toilets, a shelter and a fireplace. Other visitor sites in the planning area have been used occasionally in the past by campers. The Spring Creek site is on Spring Creek, at the eastern end of the

planning area (section 6.5 and figure 3). This site has basic facilities for small numbers of self-sufficient campers. Groups that use this site are often involved in nature appreciation or survey, birdwatching, prospecting or trail-bike riding.

Picnic facilities are also available at the Heathcote Powder Magazine and the Mount Black Quarry sites. Fires are permitted in fireplaces at the Dargile, Spring Creek and Mount Black Quarry sites (section 6.5). The Heathcote Powder Magazine is close to Heathcote township, and short walks to Devils Caves and Viewing Rock commence at this site (section 6.4). It is regularly used by many Heathcote residents and attracts visitors from elsewhere. Scenic viewing is popular from the Mount Ida lookout, Viewing Rock and Melvilles Lookout. Considerable damage to vegetation and soils has been caused at the South Boundary site by illegal off-road trail-bike riding.

It is not practicable to provide potable water within the planning area. Water supplied from the tank and tap at Dargile picnic and camping area is not for human consumption. Visitors need to bring their drinking water with them.

TABLE 5 MANAGEMENT OF VISITOR FACILITIES

SITE	CURRENT TOILET AND PLANNED LOS		PICNIC TABLE	PICNIC SHELTER	PUBLIC FIRE PLACE	DRINKING WATER SUPPLY	PARK INFO	LOOKOUT	CAR PARK
SCENIC VIEWING									
Mount Ida Lookout	B	N	P	N	N	N	N	E	E
Viewing Rock	B	N	N	N	N	N	N	E	E
Melvilles Lookout	B	N	E	N	R	N	N	E	E
CAMPING & PICNICKING									
Dargile	M	E	E	E	E	N	P	N/A	E
Spring Creek	B	N	P	N	E	N	N	N/A	U
PICNICKING / HERITAGE									
South Boundary	B	N	E	N	R	N	N	N/A	E
Powder Magazine	B	N	U	R	N	N	N	N/A	E
Mount Black Quarry	B	N	E	N	E	N	N	N/A	E
Graytown POW Camp	B	N	N	N	N	N	N	N/A	U

Note: Commercial fire appliances using liquid or gaseous fuels may be used within the park and reserve provided that fire regulations are observed.

Key

LOS (Level of service):

- M Mid – moderate levels of visitor facilities and amenities provided
- B Basic– limited visitor facilities and amenities provided

Facilities:

- E existing facility
- N no facility
- U upgrade existing facility
- P provide facility
- R remove facility
- N/A not applicable

Aim

- Maintain visitor facilities that enhance visitor enjoyment and are consistent with the protection of planning area values.

Management strategies

- Provide and maintain visitor facilities in accordance with table 5 and figure 3.
- Monitor visitor sites to identify changing demands, and review visitor needs and management requirements if necessary.
- Decommission visitor facilities that are no longer required or that present a potential hazard to visitors (section 6.12).

- Liaise with the relevant Indigenous and historical communities and agencies to identify and protect Indigenous, cultural and historic values within visitor sites.
- Encourage continued community participation in vegetation restoration projects at visitor sites, particularly at the South Boundary and Dargile sites.
- Provide information to park visitors about the need to bring their own drinking water.

6.4 Bushwalking

A range of bushwalking opportunities are provided in the planning area, from short walks to extended overnight walks in the more remote areas. The distances and grades of

walking tracks are shown in table 6. Walking is also permitted along all roads in the planning area.

Short walks by day visitors are one of the most popular activities in the planning area. The most popular track is between the Heathcote Powder Magazine and Viewing Rock. Another short walk to Devils Caves also commences at the Heathcote Powder Magazine site. The Heathcote Bushwalking Group regularly use the planning area for their activities.

A half-day circuit walk at Mount Ida along existing roads and tracks is available and promoted in a bushwalking book (Daly 2005). Another half-day walk is planned to link Mount Ida carpark and the Dargile visitor site, along existing management vehicle and public roads. Cyclists would also be able to use this route (section 6.6), and there are opportunities to produce interpretive materials to enhance visitor understanding and appreciation of the planning area values along the track (section 6.1). The Victorian Trails Strategy (State of Victoria 2004) identifies a shortfall in short-distance trails (up to half-day walks) that are within 90 minutes drive of Melbourne. Short walks within the planning area can help to fill this shortfall.

There are no formal longer-distance walking tracks in the planning area, but experienced bushwalkers that have an advanced outdoor knowledge and navigational skills are encouraged to undertake longer walks in the planning area.

The City of Greater Bendigo is investigating the potential to extend the Bendigo–Axedale O’Keefe Rail Trail from Axedale to Heathcote (State of Victoria 2004). The extension of this trail could bring additional walkers and bike riders to the Heathcote end of the planning area. The Shire of Campaspe is also preparing a walking and cycling strategy that may link cycling and walking trails to the north of the planning area with routes through the planning area.

Aim

- Provide a variety of sustainable walking opportunities in the planning area, while minimising impacts on planning area values and other uses.

Management strategies

- *Maintain the walking track network as detailed in table 6.*
- *Ensure that maintenance works do not damage natural or cultural values (sections 4.1-4.6, 5.1 and 5.2).*
- *Monitor the impact of bushwalking on planning area values and implement protection measures as appropriate.*
- *Promote minimal impact bushwalking and, where necessary, provide information to bushwalkers on minimising the risk of spreading *P. cinnamomi* in the planning area (section 6.1).*
- *Provide information to encourage walkers to stay on designated tracks and to reduce off-track impacts and themselves (section 6.1).*
- *Provide information to local councils and tourism organisations on bushwalking opportunities in the planning area (section 6.1).*
- *Promote the planning area as a destination close to Melbourne that has short walks for day visitors (section 6.1).*
- *Encourage long-distance hikers to liaise with Parks Victoria in planning their trip to ensure that planning area values are protected and visitor safety is considered.*

6.5 Camping

Camping in the planning area is an occasional activity, often associated with other activities such as bushwalking, prospecting and car touring. Most camping occurs in the planning area in spring, summer or autumn. In the past, campers have used various sites, the most popular being the Dargile site (western end of park) and Spring Creek site (eastern end of the planning area). The Spring Creek site, in the reserve, is close to the reserve / park boundary. Some sites that have been used for camping in the past are unsuitable because of their proximity to the Special Management Area – *P. cinnamomi*. The *Recreation Framework for Box-Ironbark Public Land* management guidelines for camping (DSE 2003c) allow for camping in nature conservation reserves exceeding 1000 ha in area.

TABLE 6 MANAGEMENT OF WALKING TRACKS

ROAD / TRACK	LENGTH (KM)	CURRENT GRADE	PLANNED GRADE	CURRENT OTHER USES	PLANNED OTHER USES	ACTIONS/COMMENTS
Mount Ida Lookout	0.5	4	4			Provide directional and destination signage from the carpark to the lookout and formalise the walking track from the Mount Ida tower to the lookout site.
Mount Ida Circuit	8.5	5	4			Provide and maintain directional signs.
Mount Ida carpark to Dargile picnic area	6.2	4	3		Bi	This walking track uses existing Management Vehicle and public road network. Provide directional signage. Potential for an interpretive project along this track (section 6.1). Some improvement works/upgrade.
Dargile Forest Walk	2.5	4	3			Provide and maintain directional signs. Some improvement works/upgrade.
Wattle Gully Walk	5.5	4	4			Maintain.
Powder Magazine, Viewing Rock, Devils Cave circuit	3.1	3	3		Dog	Maintain directional signs. Potential in future to link with O’Keefe Rail Trail extension from Axedale to Heathcote.
Powder Magazine to Viewing Rock	1.0	3	3		Dog	Maintain.
Powder Magazine to Devils Caves	0.6	3	3		Dog	Maintain directional signs.

Key:

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

Grade 1 For a large number of visitors, including those with reduced mobility, with frequent encounters and high levels of interpretation and facilities.

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

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

Grade 4 For visitors to explore and discover relatively undisturbed natural environments along defined and distinct tracks with few encounters and no interpretive signage.

Grade 5 For visitors with advanced outdoor knowledge and skills to find their way along often-indistinct trails to remote locations with frequent opportunities for solitude and few encounters.

Grade 6 For highly experienced walkers to explore remote and challenging natural areas without reliance on managed tracks and with extended periods of solitude and few encounters.

Other uses

Bi Cycling and mountain bike riding.

Dog Dog walking on track only and dogs to be on leash.

The Spring Creek NCR has a total area of 403 ha. Opportunities for dispersed vehicle-based camping are provided in State forest adjacent to the planning area.

The Dargile, Spring Creek and Mount Black Quarry sites have fireplaces. Solid fuel fires are permitted only in the fireplaces at these sites (or in commercial fire appliances using liquid or gaseous fuels (see below). Collection and burning of firewood from within the planning area further depletes essential fauna habitat (sections 4.4 and 4.5) and is unsustainable. There may be an opportunity for campfire firewood collection areas to be established in the State forest areas adjacent to the planning area (figure 4).

Areas of the park outside the Reference Area, Special Management Areas and the reserve, are generally suitable for dispersed camping by hikers but not for campfires. Commercial fire appliances using liquid or gaseous fuels may be used within most areas of the park and reserve provided that fire regulations are observed.

Aim

- Provide sustainable camping opportunities while minimising impacts on the planning area and other visitors.

Management strategies

- *Maintain camping sites and facilities as detailed in table 5.*
- *Permit vehicle-based camping only at the Dargile and Spring Creek sites. Permit the use of generators at these sites only between 10 am and 4 pm.*
- *Permit dispersed camping, and the use of gas or liquid fuel stoves, by hikers in the Conservation and Recreation Zone except for areas within 500 metres of designated camping sites (table 5), in the Special Management Areas and the reserve.*
- *Consider seeking an adjustment of the park boundary to include the Spring Creek site within the park.*
- *Prohibit firewood collection within the planning area.*
- *Provide information to campers about the need to bring their own firewood from*

outside the planning area, and investigate with DSE if there are opportunities to provide campfire firewood collection areas in State forest areas adjacent to the planning area.

6.6 Cycling and mountain bike riding

Bike riding in the planning area currently is at a low level and occurs mostly in the vicinity of Heathcote. However, the extension of the O’Keefe Rail Trail from Axedale to Heathcote, and the walking and cycling strategy, being prepared by the Shire of Campaspe, are likely to increase the level of bike riding in the planning area (section 6.4).

Bicycles, including mountain bikes, can be ridden on all roads and tracks in the planning area as designated in tables 3 and 5. All off-road cycling threatens the natural and cultural values by damaging vegetation and soils, with resulting fragmentation of habitat and soil erosion. The ‘Mountain Bike Code’ outlines guidelines for safe cycling methods that minimise the impacts of cycling on planning area values (DSE 2003c).

The existing management vehicle only roads, and public roads between the Mount Ida carpark and the Dargile visitor site, could be developed as a route for bike riding and half-day walks (section 6.4).

Organised cycling and mountain biking events or functions require a permit (section 7.3).

Aim

- Provide for a range of sustainable cycling and mountain biking experiences, while minimising impacts on planning area values and other visitors.

Management strategies

- *Provide opportunities for cycling and mountain bike riding on roads and tracks as shown in tables 4 and 6 and figure 3.*
- *Promote the ‘Mountain Biking Code’, integrate minimal-impact messages into park information and interpretation, and encourage bike riders to adhere to the code (section 6.1).*

6.7 Dog walking

Dog walking is generally not permitted in national parks and nature conservation reserves as dogs can have impacts on bird populations and other fauna, and their presence, scent and noise may disturb fauna and prevent foraging in areas where dogs have been. Dogs can also intimidate and annoy other visitors with their behaviour and droppings. The droppings can also pollute streams and spread disease.

Dog walking in the planning area is limited to the McIvor Range in the park (DSE 2003c). This range, which abuts Heathcote township, is a relatively disturbed area of the park and dog walking in the area is a long-established activity for local residents. Dogs being walked in this section of the park are subject to regulations that limit the impact of the activity on the park's values and the amenity and enjoyment of other visitors.

Adjacent landowners may use working dogs to move cattle or sheep through the park if in accordance with a right, and exemption from park regulations, granted by the Minister (section 7.3).

Aim

- Provide opportunities for dog walking in the McIvor Range.

Management strategies

- *Permit the walking of dogs only on leash in the McIvor Range section of the park on roads or walking tracks designated in tables 4 and 6.*
- *Encourage dog owners to be responsible and immediately collect their dog's droppings and remove them from the planning area at the end of their visit.*
- *Provide information to visitors about dog walking opportunities, the impacts of dogs on the park and visitors, and the relevant restrictions (section 6.1).*
- *Work cooperatively with DSE, local councils and Tourist Visitor Information Centres to promote alternate areas outside the planning area where dogs are permitted on and off-leash (section 8.3).*

6.8 Horse riding

Some horse riders use the planning area regularly, though not in large numbers. Horses are permitted on all formed roads that are open to private vehicles in the planning area (DSE 2003c). Horse riding and camping with horses are also permitted in State forest areas adjacent to the planning area.

Horse riding, particularly in large groups, can conflict with other visitor activities and result in damage to tracks, accelerated soil erosion and the introduction and spread of weeds and diseases. To reduce the potential impact of horses, camping with horses is not permitted in the planning area. The 'Horse Riding Code' provides guidelines to help riders protect planning area values and avoid conflict with other visitors and is available on the Parks Victoria website (www.parkweb.vic.gov.au).

Small groups of riders do not require a permit for riding in the planning area. Organisers of proposed horse riding events or functions must obtain a permit for the event (section 7.3).

Aim

- Provide opportunities for horse riding while minimising impacts on planning area values and other visitors.

Management strategies

- *Permit horse riding on all formed roads open to private motor vehicles in the planning area (table 4).*
- *Provide information to visitors about horse riding opportunities in the planning area (section 6.1).*
- *Encourage adherence to the 'Horse Riding Code'.*
- *Work cooperatively with DSE, local councils and Visitor Information Centres to promote alternate areas where horse riding and camping with horses are permitted (section 8.3).*

6.9 Orienteering and rogaining

In recent years there have been few orienteering events in the planning area and adjacent State forest. However, those that have been held have been large, with hundreds of participants. The Mt Ida and Graytown areas are favoured for orienteering and rogaining

events as detailed maps have already been produced for these locations. The whole of the planning area is, however, attractive for orienteering, and orienteering clubs plan to map further areas for future events in the planning area (W. Williams, pers. comm.) in consultation with Parks Victoria.

Orienteering and rogaining events are permitted in the planning area, except within the Reference Area Zone and Special Management Areas throughout the year, and subject to regulation in the Special Protection Area – Fauna Refuge during spring (section 4.5). Further details on orienteering and rogaining can be found in the *Recreation Framework for Box–Ironbark Public Land* (DSE 2003c).

Event organisers require a permit from Parks Victoria to host an event in the planning area (section 7.3). Parks Victoria and event organisers work cooperatively to ensure events are held in areas that pose the least threat to planning area values and the least interference to other visitors.

Aim

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

Management strategies

- *Allow orienteering and rogaining in accordance with operational policies in the Conservation and Recreation Zone, except for the Special Management Areas. Include special restrictions in permits for orienteering or rogaining in the Special Protection Area – Fauna Refuge in spring as necessary to protect values and the amenity of other visitors (section 7.3).*
- *Work with event organisers to identify and protect sensitive values or features in proposed event areas.*

6.10 Prospecting

Prospecting is a moderately popular activity within the planning area, and is a traditional activity for some prospectors.

Prospecting activities reflect the strong historical association of the planning area with the history of gold discovery (section 5.2).

Prospecting should not be confused with ‘treasure hunting’ —searching for archaeological relics (coins, bottles, etc). The disturbance of archaeological relics without a permit is an offence under the Heritage Act.

Parks Victoria manages prospecting in cooperation with prospecting clubs and organisations in a manner that protects the natural and cultural features of the planning area. A prospecting guide (DPI 2004) provides information about prospecting, including Prospectors and Miners Association of Victoria’s (PMAV) Code of Conduct for this activity.

In Victoria, searching for minerals 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 a Tourist Fossicking Authority. Prospecting under such authorities is conditional on the protection of vegetation and the repair of any damage to the land, including the backfilling of any holes on the same day, and is limited to the use of non-mechanical hand tools. Prospectors generally use a metal detector, shovel, mattock or similar implement, or pan.

The whole park, except for the Mount Black Reference Area, has been designated for searching for minerals (prospecting) by the Minister for Environment (Gazette No S199, 30 October 2002). Prospecting is currently permitted in the reserve (DSE 2003c). The ECC recommended that, in both the park and the reserve, prospecting be permitted in designated areas located away from significant values, notably small ground-dwelling animals and plants which may be damaged as a result of prospecting, and that the areas be developed as part of the management plan process in consultation with the PMAV (ECC 2001) (section 2.5).

This plan proposes a redefinition of the area available for prospecting (table 2 and figure 2), with prospecting no longer permitted in Special Management Areas (approximately 5% of the planning area is not available for prospecting). This is to protect the soils and vegetation of the planning area from the spread of *P. cinnamomi* (section 4.7), to protect heritage places around the Graytown Public Cemetery (sections 3.3 and 5.2) and because

the fenced area of the Mount Ida tower is not open to the public (section 7.1).

Some activities undertaken by prospectors can damage natural values by causing undue disturbance of soils and damage to vegetation. In particular, orchid tubers can be inadvertently damaged or destroyed by prospecting activities when dormant. Little information is currently available on the distribution of significant park values susceptible to disturbance, including threatened flora (section 4.4). Soil disturbance can also lead to erosion, contamination of waterways or disturbance or damage to cultural places and objects. Prospectors must not disturb Aboriginal and other cultural heritage places and objects.

Aim

- Provide opportunities for prospecting in the planning area while minimising impacts on significant values and other visitors.

Management strategies

- *Permit prospecting in the planning area:*
 - *in areas covered by the Land Use Designation – Prospecting overlay (table 2 and figure 2)*
 - *subject to prospectors holding a current Miner’s Right or Tourist Fossicking Authority.*
- *Encourage adherence to the Prospecting Guide (DPI 2004).*
- *Monitor the impacts of prospecting on the cultural and natural values of the planning area, and work with prospecting groups to develop and implement solutions to address existing or potential adverse impacts of prospecting.*
- *Review the area available for prospecting area if impacts become unacceptable or there is new information about vulnerable natural or cultural values.*
- *Make information about prospecting in the planning area readily available to the prospecting community, including:*
 - *the areas within the planning area where prospecting is permitted*

- *values identified within the Land Use Designation – Prospecting that are sensitive to disturbance (section 6.1).*
- *Promote prospecting activities in the planning area, as appropriate.*

6.11 Tourism services

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

There are currently three tour operators licensed to undertake activities within the park. The activities offered include gold prospecting, birdwatching, bushwalking and coach or bus tours. Licensed tour operators can participate in workshops held by Parks Victoria in relation to tourism services. Potential exists for greater use of the planning area by licensed tour operators, particularly in relation to Indigenous and historic cultural heritage interpretation (section 6.1). Other activities suggested by the community as having potential for tour development include night tours for stargazing and viewing nocturnal fauna, and adventure activities including mountain biking or hiking.

Increased visitation to the planning area through the uptake of tour operator services may require some visitor management works at significant visitor sites in the planning area, such as formalisation of walking tracks, vehicle access management, directional and self-guide signs, and the provision of relevant information (section 6.1).

Tourism services in the planning area are managed in accordance with the Government’s Policy for Sustainable Recreation and Tourism on Public Land (State Government of Victoria 2002). Tourism Alliance Victoria provides a range of services for tourism businesses should they seek membership of this organisation (TAV 2005).

Aim

- Provide opportunities for and encourage the provision of tourism services by tour operators while minimising impacts on natural and cultural values of the planning area.

Management strategies

- *Ensure that all tour operators using the park are licensed, and promote awareness of Adventure Activity Standards and Minimal Impact Guidelines.*
- *Work with licensed tour operators and the tourism industry to assist with the delivery of appropriate information, interpretation and education programs about the planning area (section 6.1).*
- *Encourage Indigenous tour operators to develop and deliver interpretive and educational tours on Indigenous culture and history.*
- *Liaise with current and potential future licensed tour operators, provide information on appropriate activities and, where appropriate, host familiarisation sessions on planning area values.*
- *Monitor the effectiveness of tourism services in contributing to the achievement of the planning area management objectives.*

6.12 Public safety

Potential hazards and risks to visitors in the planning area include wildfire during periods of high fire danger, steep slopes, loose rocks, falling tree limbs, and fauna such as snakes, bees and wasps. Old mine shafts and workings located throughout the planning area are also a potential hazard to unwary visitors. Vehicles travelling at excessive speeds can pose a risk to other visitors.

An assessment of the road network and levels at which these will be maintained over the life of the plan has been undertaken in preparing this management plan. Structures used by visitors need to be regularly assessed for potential risks to visitors and appropriate mitigation works undertaken where necessary.

A fence has been erected around the Heathcote Powder Magazine to protect both visitors and heritage values.

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

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 planning area in accordance with the Municipal Emergency Response/Management Plans for Campaspe Shire, Strathbogie Shire and City of Greater Bendigo. Parks Victoria's response to emergency incidents during normal operating activities within the planning area is guided by these plans.

Potable water supplies are not provided anywhere in the planning area (section 6.3).

Aims

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

Management strategies

- *Increase visitors' awareness of safety issues and potential hazards in the planning area through the use of Park Notes, Parks Victoria's website and information signs (section 6.1).*
- *Liaise with and provide relevant information to local councils for inclusion in their Emergency Management Plans relating to the planning area, and ensure staff and licensed tour operators are aware of these plans.*
- *Regulate access to sites where there are risks to visitor safety, consistent with*
- *Cooperate with and support responsible agencies in emergency responses and ensure that Parks Victoria staff have adequate levels of training in emergency procedures.*
- *Audit identified risks and hazards within the planning area on a regular basis and implement risk mitigation measures as appropriate.*

7 STRATEGIES FOR AUTHORISED AND ADJACENT USES

7.1 Infrastructure

There are a number of public utilities in the park, including:

- a fire lookout tower on top of Mount Ida, operated by DSE
- telecommunications infrastructure attached to the Mount Ida fire lookout tower (operated by Optus Mobile, Telstra, Country Fire Authority, VEC Networks, State Emergency Service and DSE)
- electrical transmission lines managed and operated by Powercor (two small sections in the park: along the Northern Highway south of Mount Ida, and along the Heathcote–Nagambie Rd near Graytown)
- telephone cables managed and operated by Telstra (along South Mount Ida Track and up to the Mount Ida tower on the western face of Mount Ida).

The Mount Ida fire tower and associated telecommunications infrastructure is within a fenced area (less than one hectare) that is not open to the public.

Under the provisions of the National Parks Act, the consent of the Secretary to DSE is required for public authorities to install or operate utilities in the park. Authorisations include conditions to minimise effects on the park and visitors.

There is no infrastructure in the reserve.

Aim

- Manage public authority works and proposals in accordance with legislation and policy.

Management strategies

- *Review all unauthorised infrastructure in the planning area, and develop proposed consents, including appropriate conditions, for consideration by the Secretary to DSE in accordance with legislation and Parks Victoria's operational policy.*
- *Seek to manage any new public works proposals for the reserve in accordance*

with Parks Victoria's operational policy, and seek authorisation in accordance with the Forests Act and Crown Land (Reserves) Act, as relevant.

- *Monitor all works and activities relating to infrastructure, and liaise with authorities to ensure conditions included in authorisations are met, and reviewed as necessary, to minimise impacts on the planning area.*
- *Develop protocols and appropriate authorisations for the use and maintenance of the Mount Ida tower.*

7.2 Private occupancies

A number of lease and licence agreements authorising certain uses apply to the planning area. These are reviewed periodically to ensure that the planning area's values are not compromised.

Mining

There are two current mineral exploration licences granted under the Mineral Resources (Sustainable Development) Act covering approximately 6000 ha of the park. The government-approved ECC recommendations (Victorian Government 2002) allowed for these exploration licences to be renewed in the park subject to Ministerial consent and tabling in Parliament. Within the area of the current exploration licences, mining licences may also be granted subject to Ministerial consent and tabling in Parliament. In the reserve, exploration licences and new mining licences may be granted under the Mineral Resources (Sustainable Development) Act, subject to the consent of the Crown land Minister. Mining is subject to Government decision on individual proposals. Currently, no exploration or mining licences apply to the reserve.

All exploration and mining activity must comply with the Heritage Act (section 2.5).

Apiculture

There are 26 apiary sites in the park for which apiary permits can be issued under section 21(1)(b) of the National Parks Act for periods not exceeding six months. There is one apiary

site in the reserve for which a permit has been issued under the Forests Act. The location of apiaries at these sites is unlikely to cause conflict with the Reference Area or visitors. The application of the Special Management Area – *Phytophthora cinnamomi* overlay will require one apiary site to be relocated, through negotiation with the licensee.

Aim

- Manage private occupancies and activities in accordance with legislation and policy.

Management strategies

- *Relocate the apiary site within the Special Management Area – Phytophthora cinnamomi, through negotiation with the licence holder.*
- *Continue to permit access to existing apiary sites in accordance with Parks Victoria’s operational policy and subject to the outcome of research into the ecological impacts of the industry on planning area values and management requirements.*
- *Ensure that all occupancies are appropriately authorised, monitored, used and operated so that their impacts on the planning area are minimised and they do not conflict with planning area values.*

7.3 Occasional uses

Occasional uses of the planning area permitted under Parks Victoria’s operational policies include military training and commercial filming and photography. Requests to hold organised events or functions in the planning area are occasionally received and require a permit to be issued prior to the event. Events with large numbers of participants or spectators have the potential to disturb fauna and disrupt reproductive processes, particularly during spring (section 4.5).

External organisations or individuals require a research permit to carry out any research or monitoring in the planning area. Research permits for parks may be issued under the National Park (Parks) Regulation 2003 and for nature conservation reserves under the Crown Land (Reserves) (Nature Conservation Reserve) Regulations 2004, by the Department of Sustainability and Environment. Details of

permit requirements are available at www.dse.vic.gov.au.

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. A permit is required for all filming and photography conducted as part of a trade or commercial activity. Amateur photographers or people taking film or video for personal or hobby interest do not require a permit.

The Australian Defence Force generally avoids protected areas for training exercises. However, search and rescue, field navigation or incident response activities may be undertaken in the planning area subject to a permit with conditions to ensure minimal impacts on the area. The Defence Force usually undertakes its local training activities in adjacent State forest, which may require passage through the planning area.

Under section 30K of the National Parks Act an adjacent landowner can be permitted to move cattle or sheep through the park to access other parts of their property, where no alternative access is available. Dogs assisting in the movement of stock may also be permitted (section 6.7).

Aim

- Manage occasional uses in accordance with legislation and policy.

Management strategies

- *Identify any current uses of the planning area that require authorisation. Liaise with users to negotiate permits for any future activities.*
- *Protect heritage places, the Special Management Area – Heritage, the Special Protection Area – Fauna Refuge, and other areas sensitive to disturbance including any identified Powerful Owl or Barking Owl breeding areas, when considering requests for occasional uses in the planning area and in determining conditions for event permits.*
- *Monitor occasional uses, liaise with users, and review conditions of authorisations, as*

necessary to ensure that operational policy objectives are met.

- *Permit events and functions that:*
 - *have minimal environmental impacts*
 - *do not damage cultural values of the planning area*
 - *do not unduly disturb or disadvantage other visitors*
 - *do not unduly increase liability risk exposure*
 - *can be appropriately managed with available resources.*
- *Ensure that the relevant Registered Aboriginal Party is consulted and involved in the planning and participation of events relevant to its interests.*
- *Favour events and functions that provide community benefits or complement planning area values.*
- *Encourage proponents of activities, including Australian Defence Force training, which could impact on the natural or cultural values of the planning area or the amenity of visitors, to seek access to suitable alternative public land.*
- *Manage commercial filming and photography in accordance with Parks Victoria's operational policies.*
- *Seek the provision of permits for adjacent land owners to move their stock through the park to access other parts of their property where there is no alternative access outside the park, and to use working dogs off-leash in the park provided they are actively engaged in the transit of stock through the park and under control at all times.*

7.4 Boundaries and adjacent uses

The planning area forms a long, narrow crescent shape, enclosing four inliers. One of these inliers is Graytown Public Cemetery, which is managed by the Trustees of the Graytown Public Cemetery (section 5.2). The extensive perimeter, totalling over 160 kilometres, abuts cleared freehold land (68%), forested areas (25%) including Puckapunyal Military Area, Redcastle–Graytown State

Forest, Dargile State Forest and Redcastle State Forest, and Heathcote township.

Most of the abutting freehold land is used for broad acre farming. Subdivision of freehold land is increasing and there are now a number of small farmlets or lifestyle blocks, particularly around Heathcote, to the north of Mount Ida, and around the Redcastle and Graytown areas. In a few locations freehold land uses encroach into the planning area.

Park neighbours

Parks Victoria and neighbouring land managers have a range of land management issues in common. These include, in particular, the conservation, enhancement and rehabilitation of vegetation and soils, and the control of pest plants and animals and diseases. The relevant Catchment Management Authorities generally encourage and coordinate the implementation of conservation projects on neighbouring freehold land (section 8.3).

Conservation activities on lands abutting the planning area could enhance conservation outcomes for the planning area through partnerships between Parks Victoria, the CMAs and neighbours in implementing conservation projects that span the planning area boundary (sections 4.3, 4.4 and 4.5).

The Good Neighbour program provides funding to neighbouring landholders for cooperative pest and plant management projects that are mutually beneficial across land tenures. Funding for the Good Neighbour program is coordinated by the Department of Primary Industries (DPI). Parks Victoria notifies the relevant neighbours when undertaking pest animal control works within the planning area.

Management of the adjacent State forest areas will be guided by the Bendigo Forest Management Area Management Plan, currently under development by DSE, with detail of the natural and cultural values of these areas being documented in this plan. DSE and Parks Victoria coordinate their management activities along the State forest–park boundary, including planning and management for pest plants and animals, fires and roads.

The Puckapunyal Military Area (44 000 ha) carries Box–Ironbark forest communities (including some of the largest remnants of Box–Ironbark Forest EVC in Victoria, covering approximately 14 000 hectares) and other significant vegetation, flora and fauna. The area has been used by the Department of Defence for military training activities for more than 50 years. The Military Area manager aims to be a leader in sustainable environmental management and is developing an Environmental Management System with a view to ISO 14001 certification.

Adjacent landowners may be permitted to move cattle or sheep through the planning area (section 7.3).

Aims

- Cooperate with adjoining land managers and local municipalities to resolve boundary and adjacent land use issues.
- Increase awareness and support for the planning area and maintain good relations with neighbours.

Management strategies

- *Encourage the application of the Good Neighbour program to manage issues on or near the boundary of the planning area, implement programs and encourage neighbouring landholders to participate in schemes such as Land for Wildlife and Landcare.*
- *With the support of neighbouring landholders, progressively implement a program to remove intrusions and repair impacts from boundary encroachments in the planning area, through community education, letters, site visits, surveys and follow-up inspections, where necessary.*
- *Cooperate with neighbouring landholders in coordinating fire and pest control programs and other works, including road maintenance, where appropriate.*
- *Encourage sound conservation and land management practices on private land adjoining the planning area, in collaboration with the NCCMA and GBCMA (section 8.3).*

8 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

8.1 Community awareness

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

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

There is an opportunity to raise awareness of the planning area and its values, particularly within local communities such as Nagambie, Graytown, Costerfield and Rushworth. Schools and existing groups such as scouts and guides provide links with these communities.

Aims

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

Management strategies

- *Promote opportunities for community members to make a difference to the planning area's management by taking shared responsibility and becoming directly involved in the park and reserve management, particularly through existing community groups and networks (section 6.1).*

- *Encourage people from the wider community to become interested in the planning area and its management through media articles, attendance at relevant community events and advertisements for park-related activities.*
- *Increase public awareness and understanding of significant management activities in the planning area, including fire management and prescribed burning, pest plant and animal control, ecological management and the conservation of threatened species, through the provision of information at community events and meetings.*
- *Promote information on park and reserve features, values and management activities to the local community.*
- *Communicate to the broader community the work of Friends, volunteers and community groups.*
- *Liaise with the local community in collaboration with local government and the CMAs to enhance community understanding of responsible pet ownership, the value of planting indigenous vegetation and problems associated with environmental weeds.*

8.2 Community participation

The participation of community groups and individuals can enrich and strengthen park and reserve management and is pivotal in effective long-term planning, use and protection of the park and reserve values.

The Traditional Owners have considerable interest in and aspirations for the park and reserve 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 the Traditional Owners' views in the park and reserve planning and management and reconciliation of their interests and aspirations with those of other members of the community. Indigenous groups that have

interests in the planning areas include the Ngurai-illam Wurrung, Bendigo Dja Dja Wurrung Aboriginal Association Incorporated, Taungurung Clans Aboriginal Corporation and the Yorta Yorta Nations. Bendigo and District Aboriginal Cooperative and Rumbalara Aboriginal Co-operative also have interests in the area.

Volunteers and community groups make valuable contributions to management projects. They bring diverse and valuable knowledge, skills and experience to share with Parks Victoria staff and others involved in management activities in the planning area. Volunteers also bring great enthusiasm and add valued resources to assist in management projects. Historically, members of the local community have visited and used the planning area for a variety of activities.

In the relatively short time since the declaration of the park there has been active involvement of students and community groups in many projects within the planning area. Projects have included:

- revegetation works by local primary schools at the Dargile site
- Aboriginal cultural heritage survey by the Taungurung community
- fauna research, weed assessments and weed management in the Dargile area by tertiary students and Green Corps
- research into areas potentially affected by *P. cinnamomi* by tertiary students
- fauna sightings, particularly birds, by local and regional enthusiasts
- participation by people with historical associations with the planning area in an oral histories project, the outcomes of which will be shared with the wider community through interpretive and educational programs (section 6.1).

The many groups willing to be more actively engaged in projects in the planning area include the Heathcote Historic Society, McIvor Landcare Group, four wheel drive clubs interested in revegetation works, and tertiary students undertaking an assessment of the condition of walking tracks and signage requirements.

The Trustees of the Graytown Public Cemetery are descendants of people buried at the Graytown Cemetery. This group maintains an ongoing management role at the cemetery and are custodians of historical records for the cemetery and surrounding areas (Y. Cochrane pers. comm.).

The interests in the planning area of community groups often overlap and may not be complementary. There can be considerable mutual benefits where such groups work together and with Parks Victoria and the Traditional Owners to achieve common goals.

In particular, there are opportunities for adjacent land managers, Landcare groups, CMAs and other land management agencies to adopt a partnership approach and cooperate with Parks Victoria in addressing the issues of fragmentation and connectivity of natural habitats and landscapes through conservation and revegetation, and landscape-scale threat abatement programs (sections 4.3, 4.4, 7.4 and 8.3).

Parks Victoria offers annual grants for park-related community projects. There are also other sources of funding available for community projects through CMAs, local, State and federal government initiatives that will benefit the planning area, particularly projects aimed at heritage, environmental conservation or community capacity-building.

Aims

- Support and encourage the whole community including volunteers to actively assist in managing the planning area by participating and contributing their knowledge and skills.
- Inform, enrich and strengthen management of the planning area by respecting and acknowledging the community's tradition, especially relevant Indigenous knowledge.

Management strategies

- *Work to establish and maintain relationships with relevant Indigenous communities. In particular, seek to further develop a close inclusive working partnership with the relevant Registered Aboriginal Party.*
- *Encourage the establishment of an Indigenous reference group to work with*

Parks Victoria, in accordance with legislation and operational policies, and explore means to involve them in reflecting the Traditional Owner's knowledge, interests and aspirations in the management of the planning area (section 5.1).

- *Liaise and cooperate as appropriate with the relevant Registered Aboriginal Party in dealing with Aboriginal cultural issues that relate to the planning area.*
- *Seek to establish, maintain and strengthen relationships with Friends and volunteers and other community groups that use or have a particular interest in the planning area. Encourage and support these groups to work together with each other and Parks Victoria and the Traditional Owners to achieve shared goals for the planning area.*
- *Host an annual planning area information event to provide information to interested groups from local and regional communities on the annual works program and progress in implementing the management plan, and to celebrate the achievements of Friends, volunteers and other groups participating in the management projects that directly or indirectly benefit the planning area.*
- *Seek to establish a memorandum of understanding and working protocols regarding the assessment of annual works programs, in partnership with the Registered Aboriginal Party and in liaison with AAV (section 5.1).*
- *Ensure that Friends and community groups participating in the park and reserve management have sustainable and rewarding volunteer experiences.*
- *Promote opportunities for community groups to assist Parks Victoria in the planning area's management.*
- *Encourage community and student involvement in monitoring and recording programs using standard methods, particularly for significant vegetation, fauna and pest plants animals and disease (sections 4.4, 4.5, 4.7 and 8.3).*
- *Provide opportunities for, and encourage and support, tertiary students to undertake volunteer work experience and research projects that assist in management of the planning area and are consistent with the plan.*
- *Maintain liaison with Friends, volunteers and community groups that participate in management projects in the planning area to provide guidance and support and to ensure that 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 and reserve.*
- *Support capacity-building initiatives among communities participating in the planning, use and care of the planning area through appropriate training, tools and supports which better enable volunteer participation in the planning, use and care of the planning area.*
- *Encourage and support Friends and other interest groups and volunteers to develop an understanding and appreciation of the planning area's values and the rich and diverse Indigenous knowledge.*
- *Encourage and support groups that use or have an interest in the planning area to work together to pursue sources of funding, including Parks Victoria grants, CMA grants, or local, State or federal government grants. Encourage joint grant applications with other groups as appropriate.*

8.3 Agency partnerships

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

All activities relating to the planning area that are carried out by Parks Victoria or other agencies need to accord with all legislation and government policy and, as far as practicable, be consistent with agencies' policies and

guidelines. To ensure this occurs, Parks Victoria's staff must work closely with staff of other relevant agencies and collaborate in implementing activities where appropriate.

DSE establishes parks and reserves, and provides strategic direction and policy advice for the management of the planning area, including fire management, flora and fauna values and threatening processes. Parks Victoria is a support agency, operating at the direction of DSE for emergency responses, including fire management (section 4.6).

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

The Goulburn–Broken and North Central Catchment Management Authorities prepare frameworks, including regional catchment strategies, for the integrated and coordinated management of catchments within its regions of responsibility, and they promote the cooperation of land managers in implementing the frameworks to protect and sustain development of the catchments' land, vegetation and water resources (section 4.3).

The City of Greater Bendigo, Shire of Strathbogie and Shire of Campaspe administer the planning schemes for land adjacent to the planning area, including assessing developments that could have an impact on planning area values. Parks Victoria provides input into planning applications to ensure that planning area values are protected.

Through Aboriginal Affairs Victoria (AAV), the Department of Planning and Community Development has responsibility for administering legislation protecting Aboriginal cultural heritage (section 5.1). AAV's Heritage Services Branch and Regional Heritage Team provide advice to Parks Victoria on Indigenous matters.

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

The Minerals and Petroleum Division (DPI) regulates and promotes the exploration and development of Victoria's extractive, mineral and petroleum resources. The DPI also has a coordinating and administrative role in implementing the 'Good Neighbour' program (section 7.4).

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

A number of non-government organisations such as Trust for Nature and Greening Australia have particular interests in the conservation of natural resources and may be involved in projects within the planning area or its surrounds.

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

Aim

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

Management strategy

- *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*
 - *the Country Fire Authority and DSE to ensure the safety and protection of planning area values in managing fire within and around the planning area*
 - *Goulburn Broken and North Central CMAs to reduce the impacts of land use and management on the planning area and the implementation of appropriate actions in the Regional Catchment Strategies*

- *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*
- *Minerals and Petroleum (DPI) to seek relevant advice for future mining and exploration licences in the planning area to ensure they are consistent with the protection of planning area values*
- *DPI in implementing the Good Neighbour program with adjacent land managers*
- *State and regional tourism authorities to promote the Heathcote–Graytown National Park in regional visitor information centres and in regional tourism strategies*
- *the City of Greater Bendigo, Shire of Strathbogie and Shire of Campaspe regarding administration of their planning schemes, including input into adjacent or nearby developments that may impact on the park or reserve and the promotion of responsible pet ownership)*
- *non-government organisations in supporting projects within the planning area and surrounding areas which conserve or enhance values of the planning area.*

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 for inclusion in annual regional programs. Priorities for regional programs vary from year to year depending on available resources and government priorities.

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

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

The implementation of the plan will be consistent with Parks Victoria's commitment to sustainable practices, which involves the delivery of operations, services and facilities in an ecologically and socially responsible manner with minimal use of expendable resources and minimal generation of waste.

In implementing the plan, management will respond to monitoring and research information as it emerges. Parks Victoria's environmental management framework makes this possible. Based on the International Standard for Environmental Management Systems (ISO 14001), the framework ensures

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

Parks Victoria will use a variety of means to report to the community about the progress of implementation of the plan. The primary means will be through routine liaison between Parks Victoria, interested groups and individuals from the local community and relevant government agencies. In addition to giving regular updates, there will be opportunities for input by interested members of the community into annual priority setting and feedback on management performance (section 8.2). Initiatives such as planning area information events and community and volunteer forums will offer similar opportunities for reporting and discussions about annual programs.

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

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

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

9.2 Plan amendment

During the 10-year life of the plan, amendments to the plan may only be made by the Secretary to DSE, following an authorised process which includes community consultation, as appropriate.

Circumstances that might lead to amendment of the plan include:

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

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

9.3 Evaluation and review

Periodically through the life of the plan, Parks Victoria will assess overall progress towards implementing the strategies in the plan and 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

- Progress towards restoration of a more natural age class distribution, structure and floristic diversity of vegetation communities, while also preserving cultural landscapes.
- Protection of large old trees and large old Grey Grass Trees from damage, particularly from prescribed burning
- Increased levels of coarse woody debris on the ground as habitat for ground foraging birds, reptiles and mammals.
- An increase in the cover of indigenous ground and shrub layers in the park through a decrease in weed cover in the lower valley and creekline areas and prescribed burning where and when appropriate.

- Timely management intervention to minimise threats from foxes, cats, goats, rabbits and *P. cinnamomi*.
- Fulfilment of prescribed burning targets.
- Minimal impact on planning area values from permitted uses.
- Compliance with park and reserve regulations.

Protecting cultural values

- Progress towards working with Traditional Owners in managing the park and reserve, and in identifying, protecting and interpreting Aboriginal cultural heritage.
- Minimal impacts to significant heritage places and landscapes from human interference or other identified threats.
- Timely management intervention to avoid damaging activities and threats.

Managing recreation and visitor use

- Maintenance of the levels of information and interpretation (section 6.1).
- Achievement and maintenance of levels of service for facilities (table 5).
- Achievement of public safety standards for all new facilities and the majority of existing facilities with more than five years life expectancy.
- Achievement of agreed road and track standards (tables 4 and 6).
- Minimal impact from visitors, including individuals and school and tour groups.
- Maintenance of visitor satisfaction with the adequacy of recreational opportunities.
- Achievement of community expectations in relation to Parks Victoria's management of the planning area.
- Improvement in visitor and community awareness of planning area values.

Providing for research and promoting understanding

- Progress towards reflecting Traditional Owners views and aspirations in the planning and management of the park and reserve.

- Improvement in the understanding of the distribution, management requirements and traditional uses of significant fauna, flora and vegetation communities in the planning area.
- Ongoing partnerships with Traditional Owners, collaborative relationships with tertiary institutions and agencies and wider community participation.

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

Parks Victoria also partners external research agencies to enhance knowledge and understanding of the values and features of the park and reserve, and inform management decisions particularly in relation to pest and fire management. By using sound monitoring and assessment methods this monitoring and research work will strengthen the basis for comparing management performance over time.

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- Y. Cochrane, Trustees of the Graytown Public Cemetery.
- S. Dashper, Birds Australia (Heathcote–Graytown Management Plan Advisory Group Member).
- D. Gilmore, Forest Officer, DSE Bendigo.
- P. Johnson, Biodiversity Officer, DSE Bendigo.
- R. Johnston, Aboriginal Affairs Victoria, Department of Planning and Community Development, Melbourne.
- W. Williams, Orienteering Victoria.

GLOSSARY

Aboriginal cultural heritage – Aboriginal places, objects and Aboriginal 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.

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

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

Crown land – land belonging to the State.

Cull tree – large old tree with poor form, considered to be unmerchantable for timber production. Under silvicultural practices of the 1920s and 1930s, cull trees were killed by removing bark around the circumference of the tree's trunk, known as 'ringbarking', to allow nearby suppressed smaller trees with good form to grow faster.

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.

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

EVC benchmark – is a standard vegetation quality reference point relevant to the vegetation type that is applied in assessments. The EVC benchmark represents the average characteristics of a mature and apparently long-undisturbed state of the same vegetation type.

Fauna refuge – moist gullies within Box-Ironbark forests and woodlands offering refuge to fauna during fire and drought. These areas tend to have a higher diversity of species than the surrounding forest.

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 or reserve.

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.

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

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, they cause significant changes to habitats, food chains, ecosystems or human health by feeding on or competing with native species. Can refer to either terrestrial or marine species.

Powerful owl management area – a 500 hectare contiguous patch of forest consisting mainly of habitat appropriate for the Powerful Owl.

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

Registered Aboriginal Party – a body that is registered under Part 10 of the Aboriginal Heritage

Act as a result of a determination of the Aboriginal Heritage Council.

Scarred trees of possible Aboriginal origin – indicates that while the scar conforms to the general criteria for scarred trees, it is still considered that the scar may have a non-Aboriginal origin.

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

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

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

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

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

Traditional Owners – persons with particular knowledge about traditions, observances, customs or beliefs about the area; and have responsibility under Aboriginal tradition for significant Aboriginal places located, 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.

DPI – Department of Primary Industries.

DSE – Department of Sustainability and Environment.

ECC – Environment Conservation Council.

EPA – Environment Protection Authority (Victoria).

GBCMA – Goulburn Broken Catchment Management Authority.

HV – Heritage Victoria.

NRE – former Department of Natural Resources and Environment.

NCCMA – North Central Catchment Management Authority.

PV – Parks Victoria.

PMAV – Prospectors and Miners Association of Victoria.

VEAC – Victorian Environmental Assessment Council.

APPENDIX 1 MANAGEMENT OBJECTIVES FOR NATIONAL PARKS AND NATURE CONSERVATION RESERVES

Management objectives for national parks included on Schedule Two of the National Parks Act are listed below. For an up-to-date copy of the *National Parks Act 1975* (Vic.), refer to Victorian Acts on the Legislation and Parliamentary Documents website (www.dms.dpc.vic.gov.au).

4. Objects of the Act

The objects of this Act are-

- (a) to make provision, in respect of national parks, State parks, marine national parks and marine sanctuaries –
 - (i) for the preservation and protection of the natural environment including wilderness areas and remote and natural areas in those parks;
 - (ii) for the protection and preservation of indigenous flora and fauna and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks;
 - (iii) for the study of ecology, geology, botany, zoology and other sciences relating to the conservation of the natural environment in those parks; and
 - (iv) for the responsible management of the land in those parks;
- (c) to make provision in accordance with the foregoing for the use of parks by the public for the purposes of enjoyment, recreation or education, and for the encouragement and control of that use.

Section 17. National Parks and State Parks

- (2) The Secretary shall, subject to this Act –
 - (a) ensure that each national park and State park is controlled and managed, in accordance with the objects of this Act, in a manner that will -
 - (i) preserve and protect the park in its natural condition for the use, enjoyment and education of the public;
 - (ii) preserve and protect indigenous flora and fauna in the park;

- (iii) exterminate or control exotic fauna in the park;
 - (iv) eradicate or control exotic flora in the park; and
 - (v) preserve and protect wilderness areas in the park and features in the park of scenic, archaeological, ecological, geological, historic or other scientific interest;
- (aa) have regard to all classes of management actions that may be implemented for the purposes of maintaining and improving the ecological function of the park;
 - (b) ensure that appropriate and sufficient measures are taken to protect each national park and State park from injury by fire;
 - (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.

Management objectives for Nature

Conservation Reserves reserved under the Conservation (Reserves) Act are listed below (Parks Victoria 2003c).

- Conserve and protect species, communities and habitats of indigenous plants, animals and other organisms. (primary objective)
- Provide for research and study of the natural environment of the reserve where this is consistent with the primary objective and there is minimal impact on the reserve.
- Provide opportunities for appropriate enjoyment and recreation and education by the public where this does not conflict with the primary objective.
- Protect Aboriginal cultural sites and places.
- Protect historic features in specific reserves where noted.

APPENDIX 2 SUBMISSIONS ON DRAFT MANAGEMENT PLAN

A total of 14 submissions were received on the Draft Management Plan during September-November 2006 — 10 from organisations and 4 from individuals — as follows. No submissions were marked confidential.

ORGANISATION	SUBMISSION No.	INDIVIDUALS	SUBMISSION No.
Aboriginal Affairs Victoria	3	Vivienne Arnett-Dunlop	9
Bird Observers Club of Australia	6	Julie Monagle	10
Department of Human Services – Public Health Unit	14	Marion Riley	8
DSE – Threatened Species and Communities Unit	1 & 2	Manfred Ruff	11
Goulburn Broken Catchment Management Authority	7		
North Central Catchment Management Authority	4		
Orienteering Victoria	5		
Trustees of the Graytown Public Cemetery	13		
VicWalk	12		

APPENDIX 3 RARE AND THREATENED FLORA

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS		
		AUSTRALIA	VICTORIA	FFG ACT
<i>Acacia ausfeldii</i>	Ausfeld's Wattle		v	
<i>Acacia flexifolia</i>	Bent-leaf Wattle		r	
<i>Acacia williamsonii</i>	Whirrakee Wattle		r	
<i>Boronia anemonifolia</i> subsp. <i>aurifodina</i>	Goldfield Boronia		r	
<i>Caladenia concolor</i>	Crimson Spider-orchid	VU, RP	e	L
<i>Centipede nidiformis</i>	Cotton Sneezeweed		r	
<i>Glycine latrobeana</i>	Clover Glycine	VU		L
<i>Goodia medicaginea</i>	Western Golden-tip		r	
<i>Hibbertia humifusa</i>	Rising Star Guinea-flower		R	
<i>Hibbertia humifusa</i> subsp. <i>humifusa</i>	Rising Star Guinea-flower		R	
<i>Pultenaea graveolens</i>	Scented Bush-pea		V	L

Sources: (DSE 2005, 2006b)

Conservation status:

Australia: under Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) (EPBC Act)

VU vulnerable RP recovery plan

Victoria:

E endangered; v vulnerable; r rare

FFG Act:

L listed under Flora and Fauna Guarantee Act 1988 (Vic.)

APPENDIX 4 RARE AND THREATENED FAUNA

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS		
		AUSTRALIA	VICTORIA	FFG ACT
MAMMALS				L
<i>Petaurus norfolcensis</i>	Squirrel Glider		End	L
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale		Vul	L / A79
<i>Sminthopsis murina</i>	Common Dunnart		Vul	
BIRDS				
<i>Burhinus grallarius</i>	Bush Stone-curlew		End	L, TWB / A78
<i>Chrysococcyx osculans</i>	Black-eared Cuckoo		LR	
<i>Chthonicola sagittata</i>	Speckled Warbler		Vul	L, TWB
<i>Cinclosoma punctatum</i>	Spotted Quail-thrush		LR	
<i>Circus assimilis</i>	Spotted Harrier		LR	
<i>Climacteris picumnus</i>	Brown Treecreeper		LR	TWB
<i>Coturnix ypsilophora</i>	Brown Quail		LR	
<i>Grus rubicunda</i>	Brolga		Vul	L / A119
<i>Hylacola pyrrhopygia</i>	Chestnut-rumped Heathwren		Vul	L
<i>Lathamus discolor</i>	Swift Parrot	END, RP	End	L, TWB
<i>Lophoictinia isura</i>	Square-tailed Kite		Vul	L
<i>Melanodryas cucullata</i>	Hooded Robin		LR	L, TWB
<i>Melithreptus gularis</i>	Black-chinned Honeyeater		LR	TWB
<i>Ninox strenua</i>	Powerful Owl		Vul	L / A92
<i>Nycticorax caledonicus</i>	Nankeen Night Heron		LR	
<i>Oreoica gutturalis</i>	Crested Bellbird		LR	L
<i>Phalacrocorax varius</i>	Pied Cormorant		LR	
<i>Stagonopleura guttata</i>	Diamond Firetail		Vul	L, TWB
<i>Xanthomyza phrygia</i>	Regent Honeyeater	END	CEn	L, TWB / A41
REPTILE/ AMPHIBIANS				
<i>Varanus varius</i>	Tree Goanna		Vul	
<i>Litoria raniformis</i>	Growling Grass Frog	VUL	End	L
<i>Pseudophryne bibronii</i>	Bibron's Toadlet		End	L
INSECT				
<i>Myrmecia</i> sp. 17	Bullant		Vul	L

Sources: DSE (2003a; 2006a), SAC (2000).

Conservation status:

Australia: Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) (EPBC Act)

END endangered VUL vulnerable RP recovery plan

Victoria: CEn critically endangered; End endangered; Vul vulnerable; LR lower risk in Victoria – near threatened

FFG Act: L listed Flora and Fauna Guarantee Act 1988 (Vic.), TWB member of listed Victorian Temperate-woodland Bird Community; A# action statement prepared

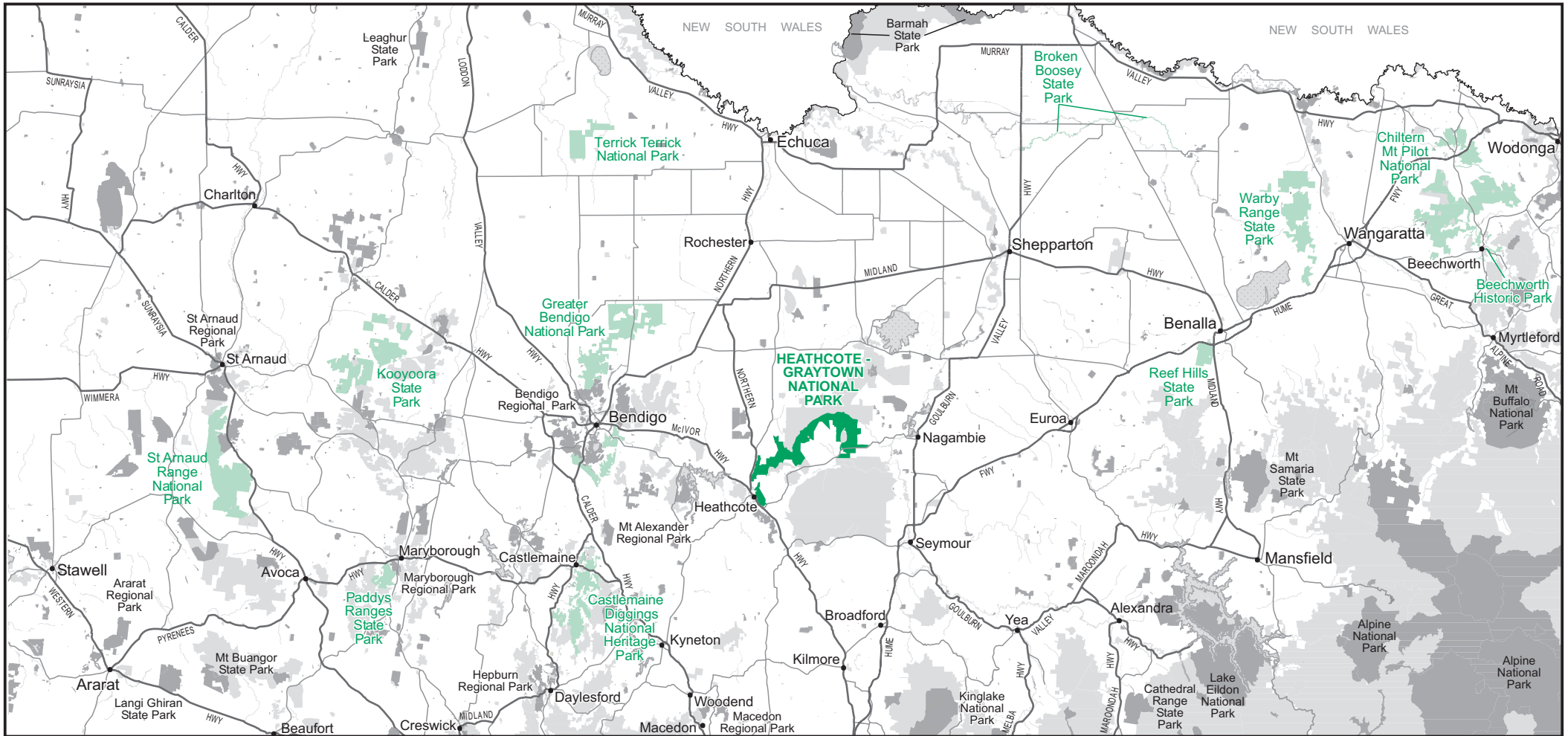
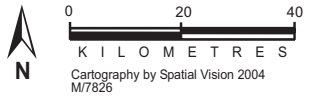
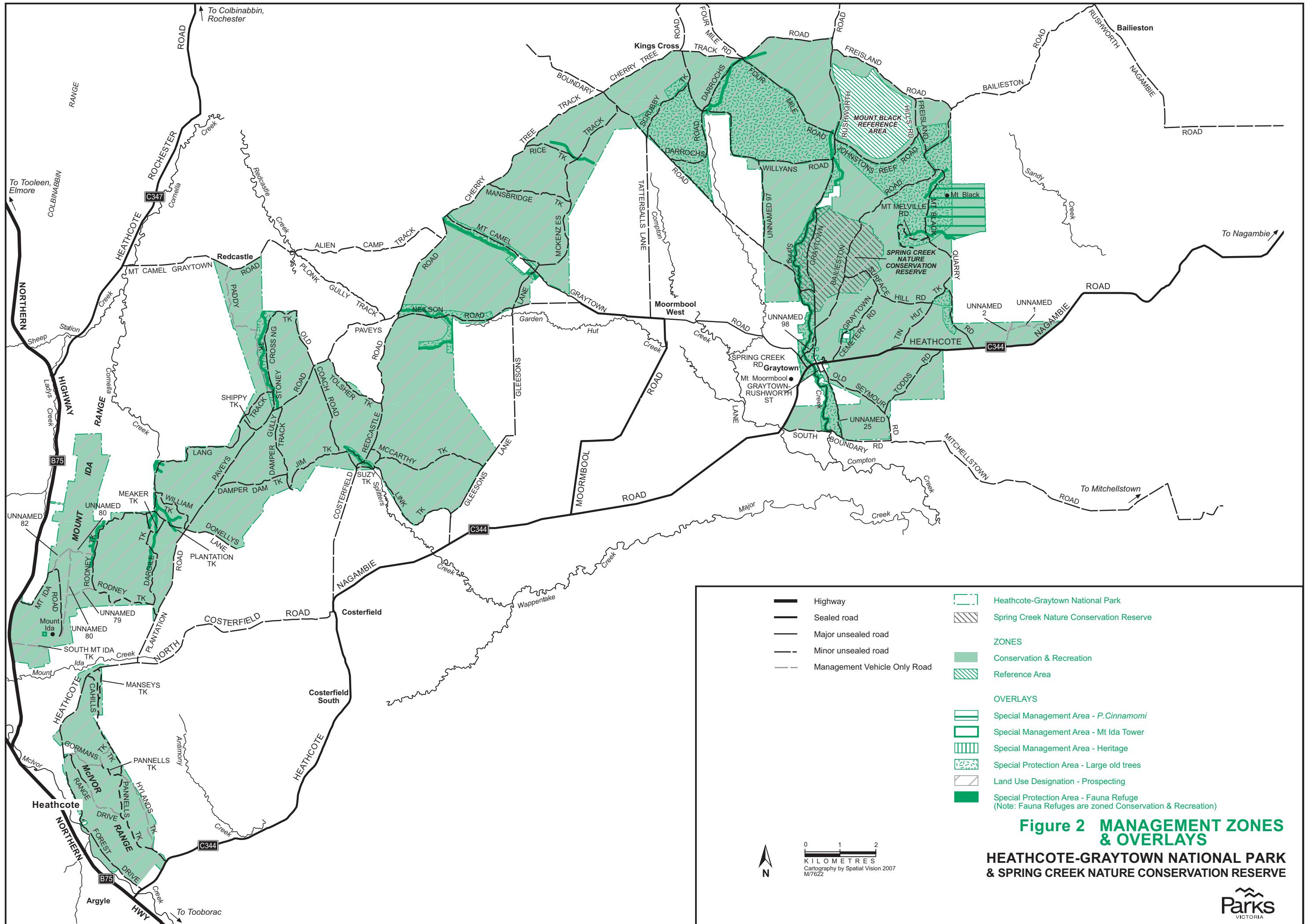


Figure 1 REGIONAL LOCALITY PLAN
HEATHCOTE-GRAYTOWN NATIONAL PARK

-  Freeway/Highway
-  Other major road
-  Heathcote Graytown National Park
-  Other Box Ironbark Parks
-  Other Parks & Reserves
-  Other Public Land
-  Waterbody





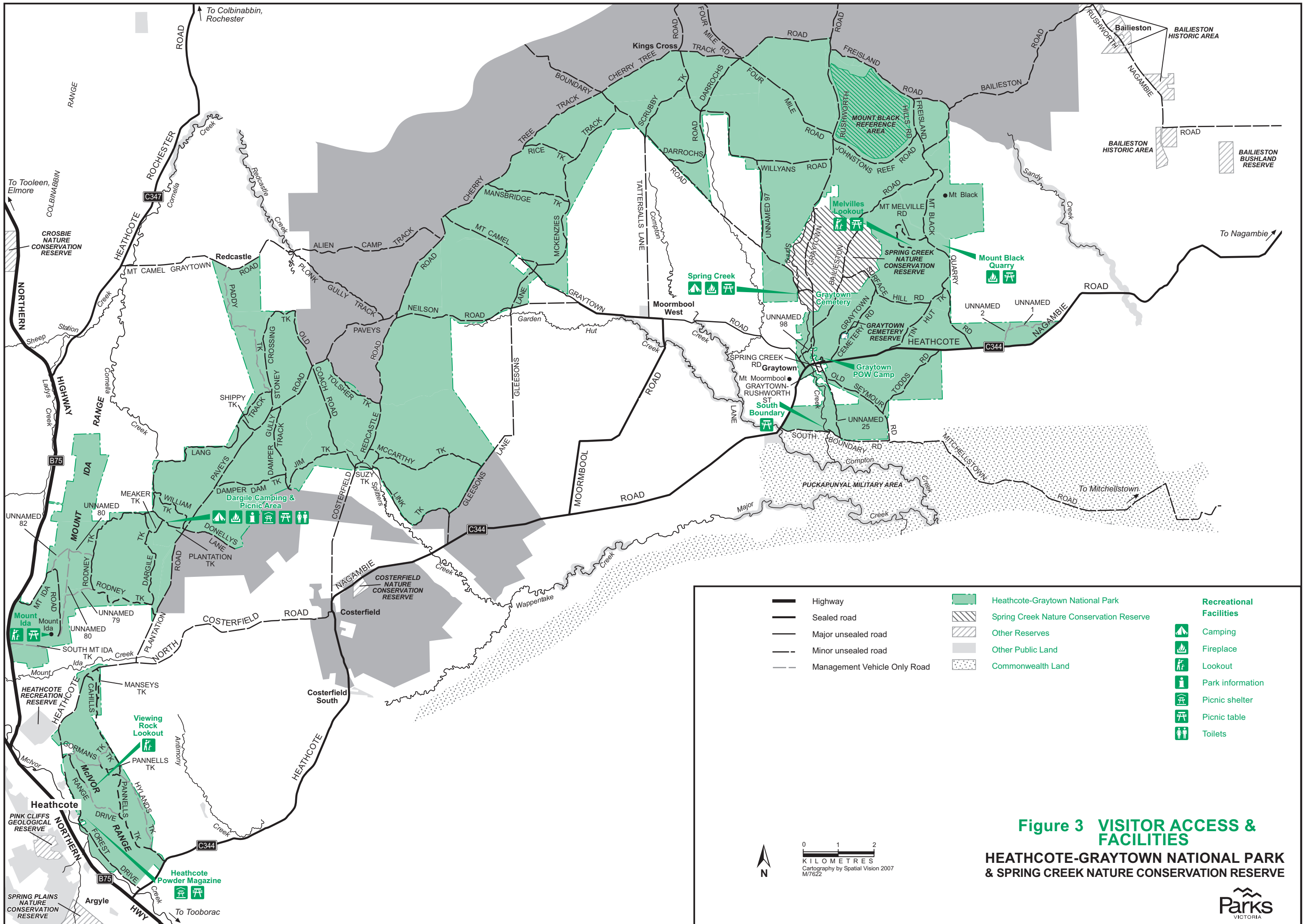


Figure 3 VISITOR ACCESS & FACILITIES
HEATHCOTE-GRAYTOWN NATIONAL PARK & SPRING CREEK NATURE CONSERVATION RESERVE

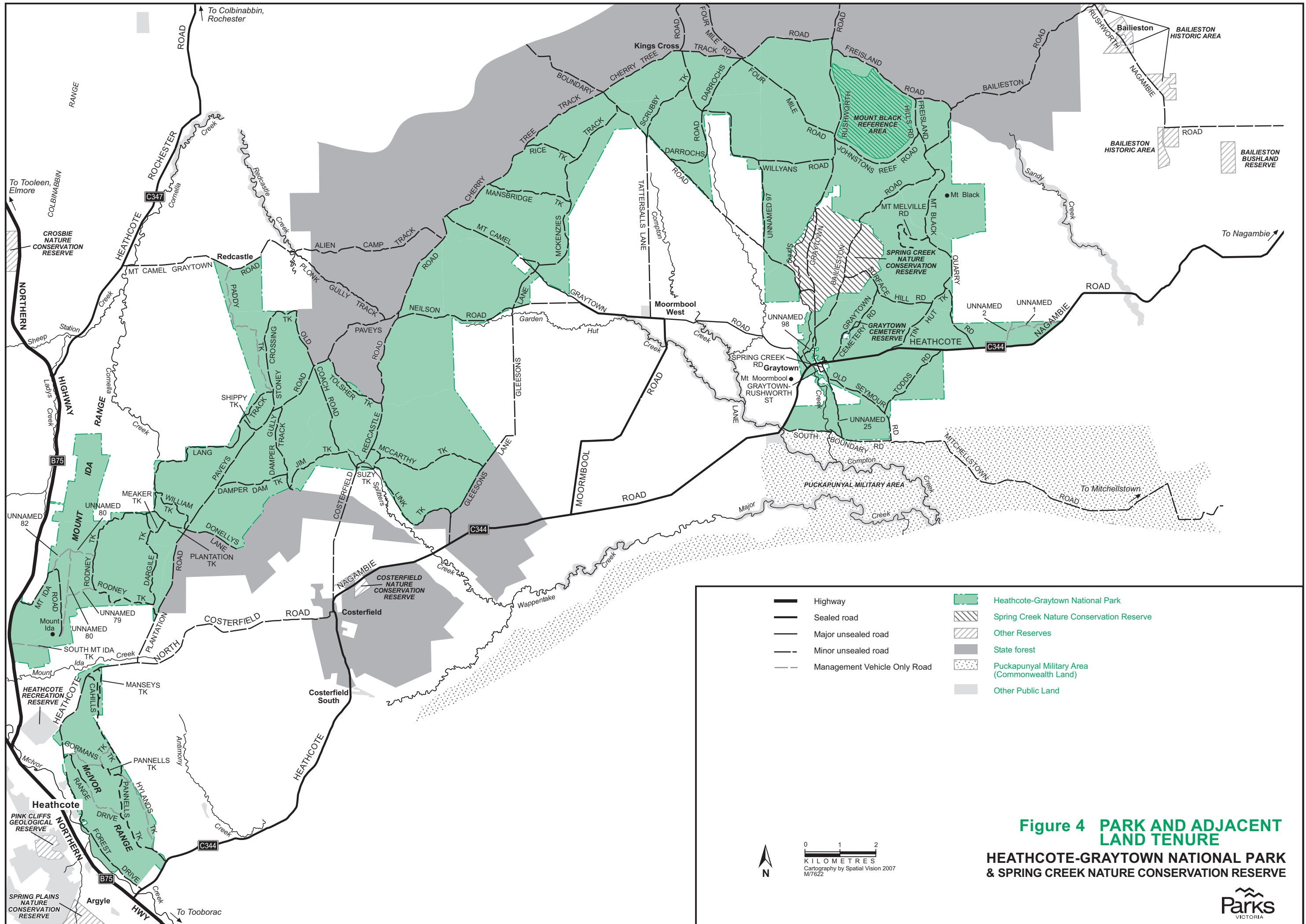


Figure 4 PARK AND ADJACENT LAND TENURE
HEATHCOTE-GRAYTOWN NATIONAL PARK & SPRING CREEK NATURE CONSERVATION RESERVE



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