# SNOWY RIVER NATIONAL PARK MANAGEMENT PLAN

**National Parks Service** 

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Victoria

May 1995

This Management Plan for Snowy River National Park is approved for implementation. Its purpose is to direct all aspects of management of the Park until the Plan is reviewed. A Draft Management Plan was published in June 1993. A total of 29 submissions were received. Copies of this Plan can be purchased from:

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Published May 1995 by the Department of Conservation and Natural Resources 240 Victoria Parade East Melbourne 3002 Victoria.

National Library of Australia Cataloguing-in-Publication entry

Victoria. National Parks Service. Snowy River National Park management plan.

Bibliography. ISBN 0 7306 4099 X.

- $1. \ \ National\ parks\ and\ reserves\ -\ Victoria\ -\ Management.$
- 2. Snowy River National Park (Vic.). I. Victoria. Dept. Of Conservation and Natural Resources. II. Title.

333.783099456

COVER: Snowy River from Gelantipy-Bonang Road (Photograph by Doug Hooley).

# APPROVED MANAGEMENT PLAN

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

The Plan provides the basis for future management of the Snowy River National Park. It was finalised following consideration of the 26 submissions received on the Draft Plan.

Mark Stone **Director, National Parks Service** 

Garry Squires **Area Manager, Gippsland** 

#### **FOREWORD**

Snowy River National Park is one of southeastern Australia's outstanding national parks. It is highly valued for its spectacular scenery, diverse environments, wilderness areas, undisturbed catchments and important archaeological values.

There are many opportunities for visitors to enjoy the Park. Viewing the breathtaking spectacle of the Little River Gorge from the lookout near the Gelantipy-Bonang road, rafting the white water of the Snowy River, camping at MacKillop Bridge, admiring the ancient forests of the Rodger River or exploring the remote and rugged interior of the Park are among the many experiences on offer.

This Approved Plan establishes the long-term management framework to protect the important conservation and recreation values of the Park while ensuring that it plays an important role in nature-based tourism in East Gippsland.

As a result of the Plan's implementation, I am confident that the Park's diverse environments, magnificently wild scenery and remote character will be protected while visitors' enjoyment will be enhanced.

I look forward to the community's support for the management of this very important national park, which is such a significant part of Victoria's parks system.

The Hon Mark Birrell MP

Minister for Conservation and Environment

#### **SUMMARY**

Snowy River National Park (98 700 ha) protects a significant representation of East Gippsland's diverse forest ecosystems, some of Victoria's most spectacular and wild natural landscapes centred around the Snowy River and its tributaries, two wilderness areas, large areas of essentially natural catchments, and significant archaeological values. The Park's diverse environments, wild scenery and remote and essentially undeveloped character make it attractive for a range of activities including vehicle touring, canoeing and rafting, walking and camping. Its very significant natural values make it a highly valuable area for nature study, and there is great potential for scientific research.

The Park will be managed as a world-class protected area for conservation and recreation consistent with its national park status. Protecting and enhancing the Park's largely undisturbed environments will be an important management goal, as will be maintaining its distinctive wild character and the sense of remoteness that are key attractions to visitors.

Visitors will be able to enjoy the Park's diverse attractions from key points on or near the main roads around the edge of the Park, (where most facilities will be sensitively located) or in the undeveloped core areas of the Park. The Park will make an important contribution to nature-based tourism in East Gippsland.

Significant management directions for the Park are outlined below:

#### Reserve conservation

- A majority of the Park will be maintained in a largely undeveloped condition, in particular the wilderness and natural catchment areas. Most visitor developments will be focussed on the periphery of the Park.
- Significant natural and cultural features will be given special protection. Initial priorities will be given to Brush-tailed Rock-wallaby, Tiger Quoll, Long-footed Potoroo and cave-dwelling bats.

# Park protection

- The Park's fire protection strategy will be refined in the light of continued research.
- A pest plant and animal strategy will be prepared which will identify key sites, target species and methods of control.
- Further testing and mapping of sites suspected to be infected with *Phytophthora* species will continue.
- Seasonal restrictions on use of some vehicle tracks will help to protect their condition.

#### The Park visit

- Surveys will be conducted to better determine visitor needs and expectations.
- Visitor enjoyment of the Park will be enhanced by improved interpretation of key features, such as Little River Gorge, Raymond Falls and Waratah Flat, and the development of a car-based scenic tour.
- Existing day visitor and camping area facilities will be maintained to a high standard. Facilities at MacKillop Bridge will be rationalised, while new facilities will be developed at Hicks and the Snowy River - Little River junction.
- A number of walking tracks of different lengths and standards will be developed.
   The Park's track system will be managed as part of a broader regional network of walking tracks.
- A permit system will be introduced to help protect environmental values and the wilderness experience of canoeing or rafting the Snowy River.
- Four-wheel-drive tracks outside wilderness areas will be maintained for public access except where there are unacceptable environmental impacts.

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# 1 INTRODUCTION

# 1.1 Location and planning area

Snowy River National Park is a rugged and remote tract of land located in Victoria's Far East Gippsland. Situated 390 km east of Melbourne and 350 km south-west of Canberra, the Park extends from MacKillop Bridge in the north to below the Buchan River junction in the south (figure 1).

The management plan covers the Snowy River National Park (98 700 ha), which includes the following areas:

- Snowy River (27 500 ha) and Bowen (17 500 ha) wilderness zones (figure 5);
- approximately 70 km of the Snowy Heritage River Area (figure 3);
- Rodger River and Mountain Creek (42 090 ha), Mount Gelantipy Creek (1900 ha) and Musk Creek (770 ha) natural catchment areas (figure 3);
- Gelantipy Plateau (430 ha), Mountain Creek (1520 ha) and Zig Zag Creek (600 ha) reference areas (figure 5);
- two small areas proposed for addition to the Park (20 ha near MacKillop Bridge and 15 ha in the south of the Park).

The Park has a common border with the Alpine National Park in the north, and adjoins primarily State forest but also some agricultural land (figure 2).

### 1.2 Regional context

The Park lies on the western edge of Far East Gippsland, a region that is attracting an increasing number of visitors who wish to experience its diverse natural attractions. It complements a number of areas throughout East Gippsland which have a similar remote character, and contrasts with a variety of more developed visitor settings. Popular destinations throughout the region include:

 Buchan Caves Reserve - an important tourist hub in the vicinity of the Park, attracting day visitors and campers to

- magnificent cave tours, and providing a base for exploring the surrounding attractions;
- Errinundra National Park attracts day visitors to rainforests, interpretive walks and opportunities for scenic short-term visits;
- Alpine National Park (Cobberas-Tingaringy Unit) - extends north from the Snowy River National Park and includes an additional part of the Snowy River valley; remote country for vehicle-based touring, walking, canoeing and horse riding; and several wilderness areas;
- proposed Cape Conran Coastal Park an area used mainly by day visitors from Marlo or Orbost, and by tourists pursuing more formal camping sites and facilities;
- Croajingolong National Park accessible to visitors seeking either vehicle-based or remote experiences on some of the most beautiful coastal scenery in the State.

Snowy River National Park, together with the Alpine National Park, is part of a tri-State system of conservation reserves in Victoria, NSW and ACT which encompasses more than 1.5 million hectares. These are managed under the Australian Alps National Parks Memorandum of Understanding. Signatories agree to pursue co-operative management and develop complementary policies to protect the natural and cultural values of the Alps.

# 1.3 Significance of the Park

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

Snowy River National Park is a park of great significance in a naturally diverse corner of the State. It protects some of Victoria's most spectacular and wild natural landscapes, as well as a significant representation of East

Gippsland's diverse forest ecosystems. It includes two important wilderness areas and contains, in Mountain Creek and Rodger River, the largest essentially undisturbed natural catchment area in the State.

The Park's diverse natural values complement those protected in other conservation reserves in East Gippsland, including: the immediately adjacent Alpine National Park, which, in this locality, protects an additional part of the Snowy River valley as well as the rugged environs of Mount Tingaringy; the rainforests and old growth forests of Errinundra National Park, where Shining Gum and Cut-tail forests are more predominant; the distinctive Coopracambra National Park with its granite peaks and sandstone Genoa River gorge; and the highly significant coastal environments of Croajingolong National Park and the proposed Cape Conran Coastal Park. In turn, these and other reserves complement various conservation measures in surrounding State forest.

The spectacular scenery and remote and wild character of the Park, the Snowy River and the Park's diverse environments attract those wanting to experience a strikingly different part of Victoria, particularly through camping, canoeing and rafting, walking, vehicle-based touring and nature study. Its proximity to Buchan and other areas of visitor interest make the Park an increasingly valuable attraction for visitors to Far East Gippsland.

The Park is listed in Category II (National Parks) of the International Union for the Conservation of Nature and Natural Resources (IUCN) list of National Parks and Protected Areas, the worldwide list of such reserves. Category II areas are managed primarily for ecosystem conservation and appropriate recreation.

Snowy River National Park is also listed on the Register of the National Estate, in recognition of the area's outstanding values and their importance as a part of our heritage.

Significant features of the Park include:

#### **Natural**

- The Snowy River, surrounded mostly by wilderness, and recognised as a Heritage River.
- The essentially undisturbed catchments of the Rodger River, Mountain Creek, Mount Gelantipy Creek and Musk Creek.
- Four sites of national geomorphological significance associated with the Snowy River and its tributary gorges, including Little River Gorge, Victoria's deepest gorge.
- Nine known caves, one of which is the deepest in Victoria.
- Very diverse vegetation types, including the multi-aged Ash forests of the Rodger River.
- The occurrence of 61 threatened plant species in a number of vegetation communities.
- Habitats supporting 250 recorded native fauna, 22 of which are listed as threatened, including the Long-footed Potoroo (which is largely endemic to East Gippsland), the rare Tiger Quoll and the Brush-tailed Rockwallaby.
- Many sites of botanical or zoological significance warranting special protection.

#### Cultural

- 133 sites listed on the Aboriginal Affairs Victoria (AAV) Register, one of archaeological significance dating back 21 000 years.
- Sites of State and regional cultural significance scattered within or near the Park reflecting early European settlement, mining and farming (e.g. MacKillop Bridge and the Deddick mining area).

#### **Tourism and recreation**

 Opportunities to experience in a variety of ways some of Victoria's most spectacular river and gorge scenery and a sense of remoteness in a largely undeveloped part of the State.

- A diverse range of natural attractions complementing features in other parts of East Gippsland, and providing opportunities for high quality interpretation.
- Short walks to key features in diverse parts of the Park, including dramatic views of the Little River Gorge and the Snowy River valley, and the ancient forests of the Rodger River.
- Car-based camping beside the sand banks of the Snowy River at MacKillop Bridge.
- The long-distance wilderness white-water canoeing or rafting trip down the Snowy River from MacKillop Bridge to Buchan River through the Tulloch Ard Gorge - the longest such trip in Victoria and a rare opportunity in south-eastern mainland Australia.
- Remote walking along rivers, through gorges and on ridge tops in wild, undeveloped and remote settings, including wilderness areas.
- Scenic 4WD touring on a network of remote vehicle tracks.

#### 1.4 Creation of the Park

Snowy River National Park was first included on Schedule Two of the *National Parks Act* 1975 (Vic.) as a result of the *National Parks* (*Amendment*) *Act* 1978 (Vic.) and was initially proclaimed on 26 April 1979 (26 000 ha). Further additions were made in 1981 (200 ha), 1987 (15 100 ha), 1988 (54 100 ha) and 1991 (3 300 ha).

The Park was created following Government decisions on recommendations from Land Conservation Council (LCC) studies in the East Gippsland (LCC 1977; LCC 1986), Alpine (LCC 1979) and Gippsland Lakes Hinterland (LCC 1983) Areas. In addition, Government additions were made in the Warbisco Creek, Home Creek, Swamp Creek and Good Hope Creek catchments, the latter two as part of decisions on national estate issues in 1991.

# 1.5 Legislation, LCC recommendations and guidelines

Snowy River National Park is reserved and managed under the National Parks Act. The Act requires the Director to preserve and protect the natural condition of the Park and its natural and other features, and to provide for the use of the Park by the public for enjoyment, recreation and education, and for research.

The Snowy River and Bowen wilderness zones were recommended by the LCC Wilderness Special Investigation (LCC 1991b). These were proclaimed on 30 June 1992 and are managed under the wilderness provisions of the National Parks Act and the relevant LCC recommendations, particularly those relating to management principles for wilderness areas (LCC 1991b).

Three Reference Areas in the Park - Gelantipy Plateau, Mountain Creek and Zig Zag Creek - are to be proclaimed under the *Reference Areas Act 1978* (Vic.) and managed in accordance with Ministerial directives and the relevant CNR guideline. Within these areas, which provide a reference for comparative study purposes, natural processes shall be allowed to continue undisturbed.

Following the 1991 Rivers and Streams Special Investigation (LCC 1991a), the Snowy River was designated as a Heritage River and the catchments of the Rodger River, Mountain Creek, Mount Gelantipy Creek and Musk Creek were designated as natural catchment areas under the *Heritage Rivers Act 1992* (Vic) and proclaimed as such on 10 August 1992. This Act provides for their protection and indicates particular uses which are or are not permitted in these areas.

The LCC has also made particular recommendations relating to appropriate use and management of the Park. Logging, hunting and the use of firearms are prohibited in the Park (LCC 1986). Grazing has also been phased out in accordance with LCC recommendations (LCC 1986). Further recommendations refer to the protection of the Brush-tailed Rock-wallaby (LCC 1979); the continuation of honey production in areas of the Park (LCC 1983); and the inappropriate use of Campbell Knob (west) for horse camping (LCC 1991b). An area of approximately 20 ha south of MacKillop Bridge has also been

recommended for inclusion in the Park (LCC 1991a).

The Park is managed in accordance with CNR guidelines for the management of parks (NPS 1993) and LCC recommendations, and with other CNR plans and guidelines, including:

- the Orbost Region Fire Protection Plan (CFL 1990);
- the Bairnsdale Region Fire Protection Plan (DCE 1991b);
- East Gippsland Forest Management Area (FMA) Plan (CNR in prep)
- The Far East Gippsland Tourism Strategy (Govt of Vic. 1988).

# 1.6 Park management aims

Sections 4, 17 and 17A of the National Parks Act provide the main basis for management of the Park. The following management aims set the framework for long-term Park management.

#### **Resource conservation**

- Protect and conserve natural ecosystems and the natural environment and landscape.
- Maintain or, where possible, enhance wilderness values.
- Allow natural environmental processes to continue with the minimum of disturbance, and recognise our obligations to maintain or enhance biodiversity.
- Conserve sites and areas of archaeological, historical and cultural significance.

#### Park protection

- Protect water catchments and streams.
- Protect Park values, facilities, visitors and adjacent land from injury by fire.
- Eradicate or otherwise control introduced plants, animals and diseases.

#### The Park visit

- Provide opportunities for appropriate recreation and tourism.
- Promote and encourage an appreciation, understanding and enjoyment of the Park's natural and cultural values and its recreational opportunities.
- Protect the remote character of the Park.
- Encourage appropriate park use and behaviour and foster a conservation ethic in visitors.
- Take reasonable steps to ensure the safety of visitors.

#### Other

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

# 2 STRATEGIC DIRECTIONS

#### 2.1 Park vision

A future visitor to Snowy River National Park finds a world-class park renowned for its grand and wild scenery, diverse environments and the opportunity to experience a sense of remoteness away from an increasingly developed world. The Park is being managed with an increased understanding of its diverse natural environments. Its many significant species and communities are well protected, and disturbance to its significant catchment and wilderness areas is minimal.

Visitor facilities are in keeping with the remote, wild and essentially undeveloped character of the Park, and concentrated mainly on the accessible periphery of the Park. These, and accompanying high quality interpretation, assist the car-based visitor and camper to enjoy and to understand better the splendid wild and diverse environments of the Park. In the more remote areas, away from the two-wheel drive roads, visitors enjoy rafting or canoeing the white water of the Snowy River, walking in the wilderness areas or elsewhere, or four-wheel driving on the Park's remote tracks.

The Park is being increasingly valued as an important part of East Gippsland's natural tourism attractions, and it attracts visitors from interstate and overseas. Careful and sensitive management by CNR, assisted by a strong Friends group and supported by the local community, ensures that increased visitor use is accommodated without compromising the Park's key attributes. The interests of future generations are assured.

# 2.2 Management directions

Major management directions for the Park are outlined below.

#### Resource conservation

- A majority of the Park will be maintained in a largely undeveloped condition, in particular wilderness and natural catchment areas. Most visitor developments will be focussed on the periphery of the Park.
- Significant natural and cultural features will be given special protection. Initial priorities will be given to Brush-tailed Rock-wallaby, Tiger Quoll, Long-footed Potoroo and cavedwelling bats.

### Park protection

- The Park's fire protection strategy will be refined in the light of continued research.
- A pest plant and animal strategy will be prepared which identifies key sites, target species and methods of control.
- Further testing and mapping of sites suspected to be infected with *Phytophthora* species will continue.
- Seasonal restrictions on vehicle access on some tracks will help to protect their condition and to aid visitor safety.

#### The Park visit

- Surveys will be conducted to better determine visitor needs and expectations.
- Visitor enjoyment of the Park will be enhanced by improved interpretation of key features, such as Little River Gorge, Raymond Falls and Waratah Flat, and the development of a car-based scenic tour.
- Existing day visitor and camping area facilities will be maintained to a high standard. Facilities at MacKillop Bridge will be rationalised, while new facilities will be developed at Hicks and the Little River -Snowy River junction.
- A permit system will be introduced to help protect environmental values and the wilderness experience of rafting the Snowy River.

- Four-wheel-drive tracks will be maintained for public access except where there are unacceptable environmental impacts.
- A number of walking tracks of differing lengths and standards will be developed.
   The Park's track system will be managed as part of a broader regional network of walking tracks.

# 2.3 Zoning

A Park management zoning scheme has been developed to:

- provide a broad guide to the way various areas of the Park will be managed;
- indicate which management aims have priority in different parts of the Park;
- indicate the levels and types of use appropriate throughout the Park;
- assist in minimising existing and potential conflicts between uses and activities;
- provide a basis for assessing the suitability of future development proposals.

Table 1 specifies management zone characteristics and the location of these zones is shown on figure 5.

#### Reference Area Zone

Management of the zone will keep all human interference to the essential minimum and ensure as far as practicable that the only long-term changes result from natural processes.

#### Wilderness Zone

Management will aim to protect the essentially unmodified state of these areas and provide opportunities for solitude, inspiration and appropriate self-reliant recreation. Only those structures and works which are essential for the responsible management of the zone, such as tracks and helipads, will be permitted. Sites of archaeological and historic significance will also be protected.

The management requirements for the two wilderness areas are located throughout the plan, depending on the issue.

#### **Conservation and Recreation Zone**

This zone includes areas of the Park that can be managed to achieve the dual objectives of protecting the natural environment while providing for a wider range of recreation opportunities than are permitted in the two wilderness areas.

#### **Recreation Development Zone**

Management will aim to provide high quality facilities and to promote and encourage appreciation and understanding of the Park's values. Sites in this zone, which include the main car-based campsites, will be developed and promoted as major visitor destinations.

# **Special Protection Zone**

The primary management objectives of special protection areas will be the long-term conservation of the particular features they encompass. A management statement will be prepared, as necessary, for each special protection area. Details of each site are included in appendix 1 and the general location is shown on figure 5. As knowledge of the Park improves over time it is likely that other areas which will require special attention by management will be designated as special protection areas.

# TABLE 1 MANAGEMENT ZONES AND CHARACTERISTICS

	CONSERVATION & RECREATION	RECREATION DEVELOPMENT	WILDERNESS	REFERENCE AREA	SPECIAL PROTECTION
Area/ Location	51 650 ha, 52.3 %. Most of the Park outside wilderness zones.	Main visitor destinations (figure 6).	44 500 ha, 45.1% Snowy and Bowen Wilderness Zones.	2 550 ha, 2.6% Gelantipy Plateau, Mountain Creek and Zig Zag.	Areas detailed in appendix 1 and figure 5.
Description	Important natural values and scope for recreation opportunities.	Sites with facility development in a natural setting.	Large, essentially undisturbed areas.	Relatively undisturbed land types and associated vegetation.	Discrete significant areas requiring special attention.
General management	Level of access and facilities managed to minimise impacts.	Managed primarily for visitor use.	Protection of the essentially unmodified state of these areas.	In accordance with <i>Reference Areas Act</i> 1978 and CNR guideline.	Protection of significant features.
Fire management	Fuel reduction burning; fire suppression preferably using minimal impact techniques.	Fuel reduction generally by mechanical means.	Fuel reduction and ecological burning under strict controls; minimal impact fire suppression techniques.	No fuel reduction burning; fire suppression in adjacent zones.	Fuel reduction and ecological burning under strict controls; minimal impact fire suppression techniques.
Recreation activities	Broad range of activities. Minimal facilities provided.	Broad range of activities. Formalised facilities.	Self-reliant recreation only.	Not permitted.	Activities compatible with values permitted.
Access	2WD and 4WD public access generally available.	Good 2WD access generally available.	Vehicle access only for essential management purposes.	For approved scientific research.	Depends on particular values.
Signage	Direction, identification, interpretation and information signs.	Signage to support site requirements.	Minimal, unobtrusive directional signs only where essential for management.	Not necessary.	Minimal interpretation signs where appropriate.

#### 3 RESOURCE CONSERVATION

# 3.1 Geological and landform features

The Park contains a variety of features and ongoing geomorphic processes which are important for an understanding of the composition, origin and dynamics of the landscape of the region. The more significant geological and geomorphological sites are associated with the New Guinea caves area and the Snowy River, which is characterised by a steep-sided valley with a number of deeply incised gorges. Four areas along the Snowy and Little Rivers have been rated as nationally significant.

There are nine known caves in the Park which have formed in Palaeozoic limestones in the New Guinea area. One cave, an important archaeological site, is listed on the Register of the National Estate and is proclaimed under the Archaeological and Aboriginal Relics Preservation Act. Some caves provide important bat habitat and several have significant geological formations. A summary of geological and geomorphological sites is shown in table 2.

#### Aims

- Protect areas of geological and geomorphological interest, including cave and karst sites.
- Provide opportunities for appropriate research, appreciation and education of geological and geomorphological sites and processes.

#### **Management strategies**

- Manage caves in accordance with table 2 and the management recommendations (section 7) of the Victorian Caves and Karst management report (Davey & White 1986). Develop a karst management statement for the New Guinea area.
- Liaise with Aboriginal Affairs Victoria and speleological groups with regard to cave management.

- In view of the need to protect cave and karst features, their precise locations will generally not be made available to the public without the permission of the Ranger in Charge, Buchan.
- Train and equip Park staff to manage karst systems and to assist in search and rescue operations.
- Undertake regular monitoring of cave condition, paying particular attention to muddying of calcite and vandalism, and restore and maintain where necessary.

# 3.2 Vegetation

The vegetation of the Park is very diverse. Thirteen vegetation communities have been recorded in the Park, supporting over 900 native species. Sixty-one of these species are listed as threatened (appendix 2).

The diversity of the Park's vegetation is illustrated by the occurrence of Snow Gum woodlands on the Bowen Range, rocky outcrop scrubland on the northern slopes of the Bowen Range and in the lower section of Mountain Creek, ancient stands of multi-aged ash forests in the Rodger River, extensive areas of old growth Alpine Ash on Gelantipy Plateau, Manna Gum forests in the Mountain Creek and New Country Creek catchments, rainshadow woodlands near MacKillop Bridge, heathlands in the south of the Park and native grasslands at Waratah Flat.

While some areas within the Park have been subject to varying levels of disturbance from previous land uses, including some grazing and mining, the overall natural condition is very high.

Wildfire, fuel reduction burning and ecological burning can all influence the nature of vegetation communities (and their associated fauna).

#### TABLE 2 **GEOLOGICAL AND GEOMORPHOLOGICAL FEATURES**

LOCATION / CAVE	MANAGEMENT ZONE	FEATURE	SIGNIFICANCE*/ CLASSIFICATION+	MANAGEMENT STRATEGY
			Significance	
Little River Gorge	Special Protection	River gorge cut in and exposing Snowy River volcanics.	National	
Boundary Creek Gorge Campbell Knob/Tulloch	Special	Variations in morphology associated with	National	
Ard Gorge	Protection/Wilderness	changes in lithology.		
Mooresford-Lucas Point	Conservation and Recreation	Exposures of faulted contacts between Buchan Caves limestone and Snowy River volcanics.	Regional	
Mt Deddick area	Conservation and Recreation	Silver-lead mineralisation associated with quartz reefs.	Local	
Accommodation Creek	Conservation and Recreation	Mineralisation associated with faulting in Ordovician sediments.	Regional	
New Guinea Ridge caves			Classification	
NG-1	Special Protection	Bat habitat. Geomorphology	2.2 - Outstanding natural value	Restrict access from 1 June to 1 December
NG-2	Special Protection	Archaeology. Bat habitat. Geomorphology	2.2 - Outstanding natural value	Restrict access from 1 June to 1 December; AAV permit required
NG-3, NG-4	Special Protection	Bat habitat	3.1 - Wild	Register at Buchan
NG-5(Nuigini Namba Faiv)	Special Protection	Geomorphology	2.2 - Outstanding natural value	Restrict access to experienced cavers;
NG-6W, NG-X7R	Conservation and Recreation		3.1 - Wild	register at Buchan Register at Buchan
Jackson Crossing caves				
JC-3, JC-4	Conservation and Recreation	Bat habitat. Geomorphology	3.1 - Wild	Register at Buchan

<sup>\*</sup> McRae-Williams et al. (1981) + Davey and White (1986)

The management of fire therefore presents a management challenge, particularly with regard to establishing appropriate fire regimes in an area with such a diverse and closely juxtaposed set of vegetation communities. Research is required to assist in determining directions for future vegetation (and fauna) management, in particular information on the detailed fire ecology of specific vegetation communities and significant plant species in the Park.

#### **Aims**

- Protect native plant communities in their natural condition, and maintain genetic diversity.
- Enhance the long-term survival prospects of threatened or significant plant species or communities.

#### **Management strategies**

- Manage Flora and Fauna Guarantee listed plants (appendix 2) according to approved action statements.
- Encourage surveys and research on significant flora and communities in the Park to improve knowledge of their management requirements.
- Develop a monitoring program which focuses on key communities or species, in particular, those in special protection areas and those with restricted distributions.
- Allow habitat manipulation (including prescribed burning) for ecological purposes only after the preparation of a soundly researched community or species management plan\* with the approval of the Director of National Parks, and provided no other viable alternatives are available. Manipulation would be permitted only where it can be demonstrated that such action is necessary for the conservation of a significant community or population.

(\*Listing of a community or species under the Flora and Fauna Guarantee Act with an approved action statement would constitute an appropriate basis for such action.)

#### 3.3 Fauna

The diversity of habitats in the Park is reflected in the fauna found within its boundaries. Over 250 native species have been recorded, 22 of which are listed as threatened in Victoria (appendix 3). Each habitat contains several species characteristically associated with it.

The dry woodlands are utilised by many species such as kangaroos and wombats, and also three lizards: Copper-tailed Skink, Cunningham's Skink and the Red-throated Skink, which occur in the area at the eastern limit of their distribution (LCC 1985). This rainshadow area is also an important site for the rare carnivorous marsupial, the Tiger Quoll.

Both the Brush-tailed Rock-wallaby and the Common Wallaroo were once widespread in East Gippsland. They are now recognised as rare in Victoria and, in the Park, are known to occur on rocky outcrops in the Snowy River valley area.

The mature forests of the Rodger River area support substantial populations of arboreal mammals, including four of the five species of Victorian gliders and a variety of forest bats (LCC 1985). The Tiger Quoll is also of particular note in this community, as is the Giant Burrowing Frog. In addition, the occurrence within the Park of the rare Longfooted Potoroo, which has been recorded in the Rodger River catchment, is significant.

The Park's diverse bird-life includes many species which make use of hollows in mature trees for nesting, such as owls (including the rare Sooty Owl), cockatoos, parrots and kingfishers. Some species, such as the Turquoise Parrot and Regent Honeyeater, occur on the edge of their ranges and are not normally found in this area.

Particular management attention will be given to the protection of significant or threatened species or populations occurring in special

protection areas (appendix 1), in particular the Long-footed Potoroo, Brush-tailed Rock-wallaby and Tiger Quoll. Also, information is required on the distribution, ecology and management requirements of many of the Park's significant fauna.

The East Gippsland Forest Management Plan has proposed a habitat management system using corridors and other protected areas to link the Park with habitat in adjacent areas.

#### Aims

- Protect native animal communities, and maintain genetic diversity.
- Enhance the long-term survival prospects of threatened or significant fauna.

### **Management strategies**

- Manage Flora and Fauna Guarantee listed species (appendix 3) according to approved action statements. Initial priorities will be given to Brush-tailed Rock-wallaby, Tiger Quoll, Long-footed Potoroo and cave-dwelling bats.
- Improve knowledge of the management requirements of the Park's fauna, concentrating on locating threatened species and developing management actions for their protection.
- Develop a monitoring program which focuses on key populations or species, in particular Brush-tailed Rock-wallaby, Tiger Quoll, Long-footed Potoroo and Common Bent-wing Bat and those in special protection areas.
- Under section 33 of the Wildlife Act 1975 (Vic.), continue to exclude access from New Guinea 1 cave from 1 June to 1 December each year to protect overwintering and staging values of the cave for bats.

#### 3.4 Rivers and catchments

One of the major features of the Park is the Snowy Heritage River corridor and several essentially undisturbed catchments. The character of the river and its tributaries vary remarkably along their course. With the construction of the Snowy Mountains Hydroelectric Scheme, flow volumes have decreased and in-stream values have been altered. Initiatives are required to address the issue of environmental flows (LCC 1991a).

While the existing vegetation cover affords a high degree of catchment protection, some activities, including those on adjacent land, have the potential to degrade catchment qualities. These include: fire suppression and pre-suppression; road construction, maintenance and drainage; pest plant control; recreation activities; and facility development. Management strategies covering these activities are also located in other sections of the plan.

#### Aims

- Protect and maintain the integrity of catchments within the Park.
- Protect and enhance the conservation, wilderness and recreation values of the Snowy River.

#### **Management strategies**

- Minimise the impact of management and visitor activities on rivers and catchments in the Park.
- Liaise with appropriate agencies, in particular the Snowy River Interstate Catchment Co-ordination Committee (SRICCC), on issues relating to environmental and recreational flows on the Snowy River.
- Undertake works in accordance with appropriate erosion mitigation guidelines.
- Prepare separate management plans for the Snowy Heritage River and the four natural catchment areas in the Park by 1997.

# 3.5 Landscape

The magnificent Snowy River, deep gorges, dissected valleys and diverse vegetation are characteristic landscape features of the Snowy River National Park. The most spectacular views are of the valley and gorges of the Snowy River and its tributaries. The varied patterns of the contrasting vegetation communities contribute to a unique scenic beauty. Major viewing sites include MacKillop Bridge, Little River Gorge, New Guinea Gap and sections of the Deddick Trail and Bowen Track.

The areas adjacent to high-use recreation areas and access roads, and the more remote and undisturbed parts of the Park require particular attention to ensure that natural qualities of the landscape are not impaired. Park management activities, structures and activities on adjacent land have the potential to adversely affect landscape qualities.

#### Aim

• Protect and/or enhance landscape values.

### **Management strategies**

- Minimise the visual impacts of management activities, inside and outside the park.
- Protect landscape values in wilderness areas by ensuring the impact of any necessary alteration to the landscape is minimal.
- Site and design all facilities taking into account the need to protect landscape values.
- Continue to provide input to management activities in adjacent State Forest which have potential to impact on landscape values within the Park, in particular access routes on the Park boundary.
- Improve the landscape quality of degraded areas.

# 3.6 Cultural heritage

# **Aboriginal heritage**

Aboriginal groups inhabited the area that is now the Snowy River National Park over at least the last 21 000 years. The Krauatungalung occupied the lowlands, while the Monaro clans occupied the remainder of the Snowy River valley.

There are 133 Aboriginal sites within the Park listed on the Aboriginal Affairs Victoria Register. Evidence of Aboriginal occupation includes stone tools, flakes, grinding tools, open occupation sites, rock shelters and scarred trees. Key sites include the New Guinea area and Royals Camp. The Park has not been intensively surveyed for Aboriginal sites, and it is likely that further sites will be located in the future.

Aboriginal sites are a valuable cultural, scientific and educational resource for both Aboriginal and non-Aboriginal people. These sites provide an insight into past Aboriginal activities, which are part of Victoria's cultural heritage, and can increase our understanding of the impacts which human activities have on the present landscape.

#### **Aims**

- Identify, protect and, where appropriate, interpret Aboriginal sites.
- Promote further investigations into Aboriginal history and culture.
- Encourage Aboriginal involvement in the management of the park.

#### **Management strategies**

• Liaise and consult with Moogji Aboriginal Council and Aboriginal Affairs Victoria regarding the development and implementation of management and protection strategies for known sites and all new sites as they are discovered in the Park, and the monitoring of key sites such as New Guinea 2 and Royals Camp.

 Continue to assist the Moogji Aboriginal Council to facilitate a systematic oral history and archaeological survey to provide a basis for management and interpretation of Aboriginal sites in the park.

#### European heritage

Several sites of historical interest are located in the Park relating to the themes of grazing, settlement and mining. Few artefacts are visible; name and location is generally all that remains. It is likely that more sites would be revealed by further survey work. Historic sites are a valuable scientific, educational and cultural resource because they can reveal past land use activities which foster an understanding of our cultural heritage and the impact of those activities.

Key areas of interest in or adjacent to the Park include MacKillop Bridge, one of only two bridge crossings of the Snowy River in Victoria and of State significance, and the Mount Deddick mining area which was worked for silver and lead in the 1890s. A number of selections were farmed around Rodger River - Jackson Crossing (east) up until the early 1970s.

#### Aims

- Identify and conserve sites and artefacts of European historical interest and significance.
- Improve our knowledge and understanding of history in the Park and the effects of past land use activities.

#### Management strategies

- Compile an inventory, photographic record and map record of post-settlement historic sites and artefacts in the Park.
- Encourage a systematic oral history and archaeological surveys to provide a basis for management and interpretation of post-settlement sites.
- Liaise with the Department's Historic Places Section and local communities to ensure management actions do not adversely affect historic sites and artefacts.
- Use appropriate sites for interpretation and as a resource for cultural research and education.
- Outside the wilderness areas, identify representative examples of early European settlement for appropriate conservation works.
- Inside the wilderness areas, conserve remaining relics on the basis of regional or greater significance.

#### 4 PARK PROTECTION

# 4.1 Fire management

The National Parks Act requires the Director of National Parks to ensure appropriate and sufficient measures are taken to protect Parks from injury by fire.

Current fire protection measures are in accordance with the Orbost and Bairnsdale Regions' Fire Protection Plans (CFL 1990, DCE 1991b). These plans include: provision for the maintenance of a system of fire protection tracks; liaison with private land holders for the common purpose of fire management within the Park and on adjacent land; and information including the location of reference areas and areas of ecological and cultural significance. The Park's fire protection strategy will be reviewed in association with reviews of the Fire Protection Plans, or as new information becomes available, ensuring that Park values are considered in the preparation of fire pre-suppression strategies.

Research is required into the effects of fire and the fire ecology of flora and fauna communities. This is particularly important in planning controlled fire, and in the protection of those species or communities identified as threatened (sections 3.2 and 3.3).

There is good evidence to support the need for ecological burning in some parts of the Park for vegetation and habitat management. These areas include the heath communities along Mooresford Road (W. Peel, D. Cameron pers. comm. 1990), Long-footed Potoroo habitat in the upper Rodger River catchment (Scotts & Seebeck 1990), and Brush-tailed Rock-wallaby habitat in the upper Snowy River valley (Norris & Belcher 1986).

Areas which will not be subjected to fuel reduction burning include the multi-aged forests of the Rodger River, Tulloch Ard Road and Gelantipy Plateau, the rain shadow woodlands of the upper and central Snowy River, subalpine forest and woodlands of the Bowen Ranges, reference areas and rainforest. Fuel reduction burning will be avoided in, and adjacent to, areas sensitive to fire, particularly

Riparian Forest and Warm Temperate Rainforest.

#### Aims

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

#### **Management strategies**

- Undertake prescribed burning in accordance with the Orbost and Bairnsdale Regions' Fire Protection Plans (CFL 1990, DCE 1991b), and as shown in figure 4.
- Publicise and enforce fire regulations and restrictions on the use and role of fire within the Park.
- Rotate existing Priority 2 strategic corridors where possible following two fuel reduction burning cycles, as shown on figure 4.
- Develop guidelines for the siting, construction and maintenance of the helipad network (figure 4 and appendix 4) to ensure minimum visual intrusion into the surrounding landscape.
- Construct West Mountain Creek helipad. Develop plans for Mountain Creek Dead End (Bridle trail) and Moonkan Track as sites for helipads, but do not construct until required.
- Establish a network of fire dams to support fire suppression in the Park as detailed in figure 4 and appendix 4.
- Give preference to using the following suppression methods whenever practicable, particularly in wilderness areas, reference areas and special protection areas:

- use of hand tools and aerial suppression;
- use of existing or proposed helipads;
- use of existing roads and tracks and natural features as control lines;
- backburning;
- allowing wildfires to burn out to appropriate control lines, outside the main fire danger periods and where conditions allow.
- Rehabilitate fire control lines, temporary helipads and other disturbance resulting from fire suppression activities as soon as possible after the fire.
- As research provides a better understanding of fire regimes, ensure this information is included in any ecological fire management strategy, and in the review of the Fire Protection Plan, giving consideration to the objectives of the Park.
- The existing priority 4 areas will be burnt, based on ecological requirements, in accordance with the Orbost Region's Fire Protection Strategy for the dual purposes of ecological and fuel reduction benefits.

# 4.2 Pest plants, animals and diseases

Over 80 introduced plants, both exotic and native, have been recorded in the Park. While many of these are non-invasive, some have the potential to spread through the Park, threatening the integrity of indigenous flora and fauna communities and the survival of particular species.

The highest concentration of environmental weeds occurs along the Snowy River, where water transports seeds and cuttings from settled areas higher in the catchment. Blackberries and willows are widespread along the Snowy River and its tributaries and have a significant impact on riparian communities, and recreation and wilderness values. Other species occur in smaller distributions throughout the Park.

Control is complicated by the inaccessibility of many infested areas and the re-introduction of weeds by floodwaters. Common control methods involve biological, physical or chemical techniques.

A variety of introduced animals occur in the Park. Major problem species include predators such as foxes, cats and wild dogs. Elsewhere, predators have been implicated in the decline of native fauna, particularly small to medium sized mammals and ground dwelling birds (CALM 1991). The European Rabbit is also a problem, particularly on the banks of the Snowy River south of MacKillop Bridge, and in areas associated with human disturbance such as Hicks and Mooresford Road.

Other introduced animals in the Park, notably goats and pigs, warrant active control due to their low population levels and localised environmental impact. At these early stages, control can be more effective.

One particular disease threat is the fungi *Phytophthora cinnamomi* and other *Phytophthora* species. These fungi are harboured as spores in the soil and can move through drainage lines and on vehicles. An infestation has been identified near Mooresford Road in the south of the Park.

### **Aims**

- Control and, where possible, eradicate pest plants and animals in the Park.
- Minimise the impact of control programs on native flora and fauna.
- Protect the Park from other threats and diseases, in particular *Phytophthora* species.

#### **Management strategies**

- Prepare a pest plant and animal control strategy which addresses priorities for funding, control techniques and monitoring (tables 12 and 13 (CNR 1993a) provide a basis for the strategy). Particular attention will focus on foxes, cats, dogs, pigs, small infestations where eradication is possible and the reintroduction risk is low, and newly found infestations.
- Where possible, liaise and co-ordinate control efforts with neighbouring land holders.

- Liaise with and, as appropriate, assist authorities in NSW with the development of a catchment based control strategy for willows.
- Record all incidental observations of introduced animals and pest animal control efforts in the Park and monitor the effectiveness of all control works as necessary.
- Encourage interested groups, individuals and organisations to assist with pest plant and animal control where appropriate.
- Inform visitors and adjacent land holders about relevant control programs.
- In accordance with NPS guideline 2.7.2P Phytophthora cinnamomi control in parks (NPS 1993), develop an action plan for current and new infestations of Phytophthora species, with an aim of minimising their spread and protecting the remainder of the Park.

#### 5 THE PARK VISIT

#### 5.1 The Park visitor

Snowy River National Park offers three distinctive visitor experiences, each enabling visitors to enjoy the key attributes of the Park - its scenic grandeur, diverse environments and sense of remoteness. The three main opportunities are:

- for those in two-wheel drive vehicles to enjoy at key sites the scenic grandeur of the Park's landscapes (particularly the Snowy River and Little River), its diverse environments and a sense of remoteness;
- for self-reliant recreationists to enjoy the more remote areas of the Park, including its wilderness areas, particularly through canoeing or rafting the Snowy River and bushwalking;
- for four-wheel drivers and other recreationists to enjoy other remote areas of the Park.

At present, the main market segments are adventurers seeking a challenging experience in a natural setting (particularly those wishing to canoe or raft the Snowy River); and those touring or holidaying in the region who are generally vehicle-based and may or may not camp overnight in the Park.

The Park received approximately 27 300 visitors in 1993-94, including about 2000 who canoed or rafted the Snowy River, and it is predicted that this number will gradually increase. This would be consistent with recent increases in Park visitor numbers generally. In East Gippsland, although the majority of tourism is concentrated on the coast from Lakes Entrance to Mallacoota, visitation to the hinterland areas is increasing. Statewide, the National Parks Service is committed to planning to provide for a 50 per cent increase in visitor numbers over the next ten years.

Over time, it is likely that the emerging trends statewide of increasing visitor interest in ecotourism and backpacking (particularly by international visitors) will be felt in the Park. In addition, the Park's so-called 'big nature' qualities - its scenic grandeur and spectacle,

possessed by few other natural areas in the State - are qualities increasingly being sought by interstate and international travellers in Australia. They are likely to draw a growing number of such visitors to the Park. As a result, it is likely that the demand for fourwheel drive and other commercial tours catering for these visitors will increase.

The visitor services strategy for the Park will aim at providing for the three distinctive experiences outlined above. Its implementation will enhance the visitor's enjoyment of the distinctive attributes of the Park. Thus, low-key facilities at lookouts, picnic sites and camping areas will be provided and managed so as not to dominate the natural setting or diminish unduly the sense of remoteness and feeling of being in a wild landscape, which are such an important part of the visitor experience.

The development of a car-based tour from Buchan to Orbost via MacKillop Bridge will greatly assist the visitor to enjoy the key features of the Park in a cohesive manner. Also important will be the integration of the Park's walking tracks into a regional network.

Overall, the challenge for management will be to provide the opportunities for experiencing the Park's special qualities, including its wild, remote and largely undeveloped nature, without impacting on them. The promotion of minimum impact techniques and safe practices, regardless of the activity, will be important in ensuring the long-term sustainability of recreational use of the Park as well as enhancing the enjoyment of visitors generally.

Existing and future visitor needs will be evaluated to identify trends as a basis for determining appropriate future visitor services. Carrying capacities will be determined as necessary to help protect the environment and the visitor experience in the more remote parts of the Park.

#### Aims

- Provide opportunities and quality services and facilities for visitor use and enjoyment of the Park in keeping with protecting its special qualities.
- Develop an understanding of visitor profiles, attitudes, expectations and needs.

# **Management strategies**

- Provide facilities and services which highlight, but are in keeping with the area's distinctive wild, remote and essentially undeveloped character (sections 5.2, 5.3.1 to 5.3.9 and table 3).
- Conduct visitor surveys to assess visitor profiles, expectations, preferences and patterns of behaviour to assist in Park management.
- Encourage all visitors to adopt minimum impact techniques and to adhere to Codes of Conduct appropriate to their activity.
- Establish a program to monitor a representative range of visitor sites for their condition.
- Monitor visitor use to ensure adequate provision of facilities consistent with appropriate levels of use.

# 5.2 Tourism and commercial tourism operations

The Park's scenic grandeur, natural beauty, diverse environments, remote character and its proximity to other tourism attractions, such as the Buchan Caves, Alpine National Park and Errinundra National Park, make it a significant tourism asset. It has a valuable role to play in the provision of tourism opportunities in East Gippsland, particularly at the less developed and more self-reliant end of the spectrum. This is recognised in the Far East Gippsland Tourism Strategy (Govt of Vic. 1988).

The majority of tourists are car-based day visitors to MacKillop Bridge, Little River Gorge and Balley Hooley (near Buchan). Other

major user groups include canoeists and rafters, vehicle-based campers and self-reliant walkers.

The total visitor numbers for the Park belie its significance for tourism in Victoria. The opportunity for spectacular rafting and canoe trips, particularly on the section of the Snowy River from MacKillop Bridge to Balley Hooley, represents an adventure/ecotourism experience of the highest quality. This experience is an important 'icon' in promoting the range and excellence of Victoria's nature-based tourism opportunities.

Several initiatives to enhance the tourism opportunities will be undertaken in the Park. Visitor facilities will be developed at key sites. Canoeing and rafting on the Snowy River will be managed so as to ensure that camping impacts on the river environment are minimised and the visitor's feelings of solitude and remoteness are not reduced. In addition, the Park's walking track system will be integrated into a broader regional network.

The several established tour operators, who provide opportunities for those people who prefer the expertise, equipment and organisation provided, are an important part of the tourism 'infrastructure' of the Park. Such operators can play an important role in introducing visitors to the Park and interpreting it to their clients. Activities currently offered by commercial operators under permit include rafting, four-wheel drive tours, bushwalking and horse riding.

Outside the Park, but in its general vicinity, freehold land provides opportunities for accommodation and more intensive tourism infrastructure to be developed which does not impact on the Park but which helps to enhance the area's accessibility for tourism. Currently, such developments are located at Buchan, Gelantipy, Deddick, Orbost and Delegate.

#### **Aims**

 Provide for tourism activities based on the Park's remote and wild character - its distinctive quality and competitive advantage.

# TABLE 3 RECREATION FACILITIES

SITE	DEFINED CAMPS	TOILETS	PICNIC TABLES	FIRE PLACES	WATER AVAIL.	WALK TRACK	LOOK - OUT	PARK INFO.	MANAGEMENT STRATEGIES AND COMMENTS	
Day use areas										
McKellars	-	•	•	•	•	•	-	●(A/B)	Focus for day use in north of the Park.	
Balley Hooley	-	•	•	•	•	-	-	<b>O</b> (C)	Maintain and enhance to serve day visitors and canoeists	
Hicks	-	•	•	•	•	O	-	O (A/B)	Design and construct to service day visitors to the area.	
Ash Saddle	-	-	O	•	-	-	-	<b>O</b> (B)	Design and construct to service proposed self-guided drive.	
Raymond Falls	-	•	•	•	O	•	-	O(A)	Upgrade and maintain facilities to service day visitors to this area.	
Waratah Flat	-	•	•	•	•	•	-	● (A/B)	Design and construct to service day visitors to the area.	
Camping areas										
Snowy River	<b>●</b> (25)	•	-	•	•	•	-	O (B/C)	Maintain as required.	
White Box	●(8)	•	-	•	•	•	-		Maintain and service facilities at this site to support vehicle-based camping.	
<ul><li>■ EXISTING</li><li>③ EXISTING AND PROPOSED</li></ul>			O PROPOSED - NOT APPLICABLE		Information Boards:		B Site	<ul><li>A Park orientation board with shelter.</li><li>B Site specific information board.</li><li>C Smaller, unobtrusive sign.</li></ul>		

Table 3 (cont.)

SITE	DEFINED CAMPS	TOILETS	PICNIC TABLES	FIRE PLACES	WATER AVAIL.	WALK TRACK	LOOK - OUT	PARK INFO.	MANAGEMENT STRATEGIES AND COMMENTS
Bull Flat	<b>●</b> (6)	•	•	•	•	•	-		Maintain and enhance facilities at this site to support large groups for vehicle-based camps.
Little River Junction	O	-	-	O	•	-	-	-	Design and construct to service low key camping.
Jackson Crossing area	O	-	-	-	•	-	-	-	Design and appropriately site an area for vehicle-based camping.
Hicks	⊚(6)	•	•	•	•	O	-	O (A/B)	Design and construct as a focus for vehicle- based campers and larger groups in the south. Formalise for horse camping if numbers appropriate.
Balley Hooley	<b>●</b> (4)	•	•	•	•	-	-	<b>O</b> (C)	Maintain and enhance for vehicle-based and canoeist camping.
Waratah Flat	<b>●</b> (7)	•	-	•	•	•	-	● (A/B)	
Raymond Creek	<b>●</b> (4)	•	•	•	O	•	-	O(A)	Design and construct to service low-key camping.
Deddick Trail at Mountain Creek	-	-	-	-	•	-	-	-	Maintain a low-key campsite (see section 5.3.1)
Canoe launching area									
MacKillop Bridge	-	-	•	•	•	-	-	<b>●</b> (B)	Design and construct to service canoeists and rafters.

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SITE	DEFINED CAMPS	TOILETS	PICNIC TABLES	FIRE PLACES	WATER SUPPLY	WALK TRACK	LOOK - OUT	PARK INFO.	MANAGEMENT STRATEGIES AND COMMENTS
Roadside stops									
Little River Gorge	-	-	-	-	-	•	•	<b>O</b> (B)	Develop and construct an information board to interpret features of the Gorge and environs.
Little River Falls	-	-	•	•	•	•	•		Upgrade parking facilities.
Wheelers Saddle	-	-	-	-	-	-	-	O(C)	Design and establish with regard to road constraints (traffic and safety), to complement proposed self-guided drive.
New Guinea Gap	-	-	-	-	-	-	O	-	Design and establish with regard to road constraints (traffic and safety), to complement proposed self-guided drive.
One Tree Hill	-	-	•	•	-	-	•	-	Maintain and service facilities
Yalmy Road	-	-	-	-	-	-	O	O(C)	Design and establish with regard to road constraints (traffic and safety), to complement proposed self-guided drive.
Big Tree	-	-	•	•	-	-	-	-	
Caves									
New Guinea 1 & 2, Nuigini Namba Faiv	-	-	-	-	-	-	-	O (B/C)	Develop and construct an information board with cave details and access restrictions.
<ul><li>EXISTING</li><li>EXISTING AND PROPOSED</li></ul>			O PROPOSED - NOT APPLICABLE		Information Boards:		A Park orientation board with shelter.  B Site specific information board.  C Smaller, unobtrusive sign.		

- Provide opportunities for high quality adventure and ecotourism experiences.
- Support and complement broader tourism opportunities and activity in the region.
- Ensure tourism use is sustainable and that adverse impacts on the Park's natural values are minimised.

#### **Management strategies**

- Implement the management strategies for improving visitor facilities and services detailed elsewhere in chapter 5.
- Provide information to the tourism industry and the community about visitor opportunities in the Park.
- Encourage commercial tour operations which provide high quality, sustainable adventure and ecotourism experiences, within appropriate limits.
- Work with regional and State tourism bodies to ensure sound promotion and imaging of the Park, and to co-ordinate the Park with other regional tourism opportunities.
- Assist commercial tour operators in developing itineraries, knowledge about the Park and its values, and sustainable practices.
- Ensure that Rangers liaise closely with commercial tour permit holders.
- Liaise with proponents and planning authorities where tourism development proposals arise for freehold land in the vicinity of the Park so as to ensure that any facilities are compatible with Park objectives and enhance its use for tourism.

# 5.3 Visitor recreation activities and facilities

#### 5.3.1 Vehicle access

Approximately 460 km of roads and tracks traverse or abut the Park. Usage is concentrated on the two-wheel drive (2WD)

boundary roads, which expose car-based visitors to magnificent features such as the Rodger River forests, Snowy River valley, Little River Gorge and sweeping views along the Snowy River towards the rugged core of the Park. The main 2WD access will be provided by the Bonang-Gelantipy Road, Tulloch Ard Road and Balley Hooley Road on the west side of the Snowy River, and Yalmy Road, Rising Sun Road, Waratah Flat Road, Varneys Track and Mooresford Road on the east side.

The majority of tracks within the Park are accessible only to 4WD vehicles on a seasonal basis. These provide further opportunities for remote vehicle-based experiences. The Victorian Association of Four Wheel Drive Clubs (VAFWDC) is consulted when the schedule of seasonal road closures is prepared.

Some Park roads are used to service forestry activities in adjacent State Forest (see figure 6). Sections of the Yalmy Road, Rising Sun Road and Tulloch Ard Road wind in and out of the Park and the adjacent State Forest, and are used both for Park access and as timber extraction routes. This may lead to conflict between visitor traffic and log truck traffic. In the future, there may be requirements to establish some very short sections of new roads in the Park to access timber resources adjacent to the Park boundary in the Yalmy River catchment.

#### **Aims**

- Provide and maintain an access network for visitor enjoyment, management purposes and private property access.
- Minimise the impact of vehicle and track management on the Park's natural and cultural values.

# **Management strategies**

- Manage Park roads and tracks in accordance with table 4, figure 6 and CNR guidelines.
- Develop a self-guided 2WD tour from Buchan to Orbost via MacKillop Bridge,

promoting major visitor attractions along its route (table 3).

- Liaise with VAFWDC over temporary, seasonal and any necessary permanent public road closures.
- Encourage recreational four-wheel drivers to drive along Deddick Trail without camping. Regularly monitor levels of use on this route.
- Maintain a low-key campsite on the Deddick Trail at Mountain Creek.
   Monitor regularly to ensure that environmental impacts are minimised.
- Permit timber harvesting traffic only on roads specified in figure 6 and table 4.
- Do not permit timber traffic on any Park road on public holidays, public holiday long weekends and peak visitor periods without the written permission of the Parks and Reserves Manager.
- Permit, with the Director's approval, the construction of very short lengths of road from Yalmy Road to adjacent State forest in the Yalmy River catchment in order to access timber resources.
- Close and rehabilitate tracks within the Park associated with timber harvesting in adjacent State forest after regeneration works have concluded.
- Actively facilitate efforts to resolve issues concerning access through private property, including liaising with the Shire of East Gippsland and relevant landowners.
- Provide access to private property within the Park.
- Promote responsible and safe use of vehicles on Park roads through appropriate signage and publications.

# 5.3.2 Day visits

The Park's scenic natural features, particularly those that are accessible to 2WD vehicles, attract day visitors from adjacent towns or those visiting other attractions in East Gippsland. Areas set aside for day visitor use, where camping is not permitted, are desirable to minimise the impact of one group on another.

Many of the facilities provided along the main 2WD routes are there for use by day visitors (e.g. MacKillop Bridge, Balley Hooley and Raymond Creek). These sites include picnic tables and fire places, and some have toilets (table 3 and figure 6). Ash Saddle and Basin Creek are new sites to be established as more formal day visitor destinations.

#### Aim

 Establish and maintain day visitor facilities which enhance visitor enjoyment and are consistent with protecting Park values.

#### **Management strategies**

- Develop and maintain facilities in accordance with table 3 and figure 6.
- Monitor and take steps to ensure adequate provision of facilities for appropriate levels of use in keeping with the wild, remote and essentially undeveloped nature of the Park.

# 5.3.3 Camping

Camping is an important component of many of the recreation activities undertaken in the Park. Opportunities exist for camping in formal or undeveloped areas where a remote setting is a feature, whether vehicle touring, bushwalking, canoeing or horse riding.

Most vehicle-based camping occurs in the vicinity of the Snowy River at MacKillop Bridge. Supplementary sites are found at Hicks, Waratah Flat, Raymond Creek and Balley Hooley. Visitor numbers are highest during the summer holiday period, the Australia Day and Melbourne Cup Day weekends and Easter.

Bushwalkers camp throughout the Park, but primarily within the vicinity of the Snowy River and tributary gorges, and management vehicles

only (MVO) tracks. Rafting and canoeing groups camp on the sandy banks of the Snowy River on extended tours.

TABLE 4 ROAD REGISTER AND ACCESS MANAGEMENT

ROAD OR TRACK NAME	REF. NO. (FIGURE 6)	CURRENT CONDITION*	MAIN VEHICULAR USES**	COMMENTS <sup>+</sup>
	Bairnsdale			
Bonang-Gelantipy	B1	2	O	Shire maintained
Little River Gorge	В3	2	O	Access to lookout
Little River	B4	5	O	Repair track and improve drainage
Round Hill	B5	3	PP	Access restricted by private property
St Helena	B6	5	PP	Access restricted by private property
Campbell Knob (west)	В7	5	PP	Access restricted by private property, MVO - 500 m from Snowy River
Tulloch Ard	B8	3,4	O	Upgrade sections, timber extraction route
Fork (north)	В9	5	O,M	MVO - 500 m south of junction with Fork Track (south)
Fork (south)	B10	5	M	MVO
Snowy Divide	B11	5	O	
Museum Spur	B12	5	O	Helipad access
Howitt Creek	B13	5,6	M	MVO - permanent closure east of fire dam
Betts Creek	B15	5	O	Seasonal
New Guinea	B16	5	O	Seasonal
Running Creek	B17	5	O	Upgrade
Jackson Crossing	B18	5	PP	
Basin	B19	2	O	Shire maintained
Old Basin	B20	4	O	Upgrade
Balley Hooley	B21	3	O	Part Shire maintained
	Orbost			
Deddick	O1	5	O	Seasonal
Silver Mine	O2	5	M	MVO and walking track
Musk Creek	O3	5	M	MVO - wilderness; helipad access only
Mackiesons Spur	O4	5	M	MVO - wilderness; helipad access only
Waratah Flat	O5	4,5	O,M	MVO - wilderness; Seasonal- Rodger
				River to Monkey Top - Waratah Link
				Track
Bowen	O6	5	O	Seasonal
Deddick Ridge	O7	5	O,M	Seasonal; MVO - north of helipad
B/W Link	O8	5	M	MVO - wilderness
Collings	O9	5	O	Access restricted by private property
Reeds	O10	5	0	Access restricted by private property
Boundary	011	5	0	A according to d have elected as a second
Clem	O12	5	0	Access restricted by private property
Warm Corners	O13	5	0	Access restricted by private property
Warbisco	O14	5	0	Seasonal
Kangaroo Fire	O15	5	0	
Minchin	O16	5	0	Tomporomy alogues realized due to min-
Sun	O17	5	O	Temporary closure, realign due to mine shaft
Trapyard	O18	5	M	MVO

Rising Sun Table 4 (cont.)	O19	3	О	Shire maintained. Upgrade, timber extraction route
ROAD OR TRACK NAME	REF. No. (FIGURE 6)	CURRENT CONDITION*	MAIN VEHICULAR USES**	COMMENTS <sup>+</sup>
	Orbost			
Monkey Top	( <i>cont.</i> ) O20	5	O	Seasonal from Big Tree to Bowen Link Track
Monkey Top - Waratah Link	O21	5	0	Seasonal
Bowen Link	O22	5	O	Seasonal
Postman Spur	O23	5,6	M	MVO - wilderness; permanent closure north of helipad
Mountain Creek Dead End	O24	5,6	M	MVO - wilderness; permanent closure west of helipad
Campbell Knob (east)	O27	5	M	MVO - wilderness
Rich Knob	O28	5	O	Seasonal
Yalmy	O29	3,4	O	Upgrade, timber extraction route
Rodger River	O32	5	M	MVO - wilderness
Moonkan	O33	5	M	MVO north of Moon's Lookout - wilderness
Lightning	O34	5	M	MVO - wilderness
Varneys	O35	4	O	Upgrade, access to Hicks and Jackson Crossing
West	O36	5	O	-
Reference	O37	6	-	Review in fire protection plan
Mooresford	O39	3,4	O	Upgrade
Joe Creek	O40	5	O	Timber extraction route
Garnett	O41	5	O	Timber extraction route
MacKillop Bridge - Camping areas	-	2	O	Access tracks to camping sites High maintenance priority

<sup>\*</sup>Condition (according to Orbost Region Road Register)

- All weather road with passing places at 200 m intervals
- 3 Single lane road suitable for 2WD vehicles in dry weather and 4WD in all weather: passing places at 400 m intervals
- 4 Roads not meeting the criteria for Class 3 but trafficable to 2WD under normal conditions
- 5 Roads and tracks accessible to 4WD vehicles only
- 6 Roads and tracks which are not maintained or have overgrown

#### \*\*Uses

- O Open to public vehicles
- M Management purposes
- PP Open to public access, but primary use is private property access (see comments)

<sup>&</sup>lt;sup>+</sup>Seasonal road closures are determined annually depending on conditions.

#### Aim

 Provide opportunities for a variety of camping experiences that draw on the Park's remote attributes while minimising impacts on Park values.

# **Management strategies**

- Maintain and construct facilities in table 3 and figure 6 to a high standard.
- Regularly evaluate the condition of campsites in the Park to ensure recreation experiences and natural features are not compromised.
- Introduce camping fees at major camping sites.
- Encourage the use of fuel stoves in preference to firewood.
- Encourage the 'take your rubbish home' philosophy at all sites.

# 5.3.4 Canoeing and rafting

The Snowy River is highly regarded by canoeists and rafters for its wilderness paddling and white-water touring experiences lasting several days. Opportunities for this type of paddling are rare in mainland south-eastern Australia. The significant value of canoeing the Snowy River from the State border to Buchan, through the heart of the Snowy River wilderness, is widely acknowledged.

Visitor surveys, Ranger reports and intentions' records indicate river use is increasing, but not dramatically. Peak use currently coincides with the holiday periods at Christmas and, to a lesser extent, Easter. Outside of these times the river receives relatively minor use. River usage is greater during low to medium river levels.

For some visitors, overcrowding and large groups detract from the experience being sought on a trip down the Snowy River. Other issues arising include congestion at river entry and exit points and major rapids, over-use of firewood and fireplaces at some campsites, disposal of rubbish and human waste, and contingency planning and safety.

In managing the Snowy River for canoeing and rafting, the river environment and the special recreational experiences that depend on the river's wilderness setting should be protected. It is also considered desirable to establish an appropriate management framework for the river now, rather than having to introduce restrictions after problems of overcrowding and associated conflicts have developed to a significant extent in the future.

#### Aims

- Provide for canoeing and rafting while protecting the river environment and the remote nature and wilderness experience of canoeing the Snowy River.
- Encourage public awareness of safety precautions and practices when undertaking river trips.

#### **Management strategies**

- Undertake ongoing assessment of river use to evaluate and refine management actions.
- Liaise with representative bodies and user groups when developing visitor management strategies and facilities at appropriate sites.
- In consultation with the Victorian Canoe Association, Victorian Rafting Association and commercial operators, develop and implement a permit system to enhance the protection of environmental values and wilderness experiences along the Snowy River. Initial guiding principles shall include:
  - equal allocation of capacity to commercial and non-commercial sectors;
  - a maximum group size of 16;
  - a maximum number of 96 people entering the wilderness area on the river each day;

- a maximum stay of two (2) nights at any campsite and/or constraints on trip duration will apply during peak periods.
- As necessary, refine the permit system and guiding principles in the light of continuing experience and in consultation with appropriate parties.

### 5.3.5 Bushwalking

There are several tracks within the Park constructed specifically for walking, including the Silver Mine Track and the Raymond Falls to Snowy River Track. Vehicle tracks also provide scenic routes for walking in some areas.

The core of the Park, particularly the two wilderness areas, provides excellent opportunities for remote extended walks, including off-track.

In a broader sense, East Gippsland has many opportunities for a number of walks in a variety of environments. Preliminary planning is being undertaken to investigate the feasibility of a regional walking track network. It is envisaged that tracks within Snowy River National Park will play an important role in this network.

#### Aim

 Provide a range of opportunities for walking, while minimising impacts on Park values.

# **Management strategies**

- Maintain a range of walking opportunities in accordance with table 5.
- Allow walking throughout the Park except in Reference Areas and, as necessary, specific special protection areas.
- Incorporate the Park's existing and proposed tracks into a regional network which includes tracks of different distances and standards to cater for a broad spectrum of the community.
- Avoid promoting particular off-track routes in wilderness areas, and monitor

- the emergence of new tracks and campsites.
- Determine maximum group sizes within the wilderness areas, in order to minimise environmental impacts to ensure quality remote visitor experiences. The minimum impact bushwalking code encourages small groups of 4-8 walkers.
- Encourage the use of volunteers to assist in the maintenance of walking tracks.

# 5.3.6 Horse riding

Local communities and groups, riding club members, tourists and commercial operators use the Park for recreational horse riding. Most recreational horse riding takes place west of the Snowy River near Buchan and Gelantipy where access is easiest. This use is currently at a low level, but some areas have the potential to cater for increased use by horse riders.

Horse riding off established vehicular tracks is not appropriate because the area is almost entirely forested and the topography is generally steep. In addition, many areas of the Snowy River National Park support diverse and significant understorey species, which may be threatened by the establishment of bridle trails.

Horses can cause significant trampling and browsing impacts, and the introduction of weeds. Provision of horse camps must take account of these factors. In accordance with the LCC Wilderness Special Investigation Final Recommendations (LCC 1991b), horse camping on the Snowy River adjacent to Campbell Knob is not permitted.

### Aim

 Provide for horse riding and camping in appropriate areas, while minimising the impact of these activities on Park values and other users.

TABLE 5 WALKING TRACK MANAGEMENT

LOCATION	STATUS*	TYPE <sup>+</sup>	LENGTH (km)	FEATURES	STRATEGY
Short walks (up to 2 hours)					
Raymond Falls	•	В,С	2.5	Waterfall and plunge pool.	Upgrade track. Link to further walks in area. Construct information board (table 3).
Little River Falls	•	В	2.5	Dry sclerophyll forest, waterfall.	Maintain as required.
Little River Gorge	•	С	0.8	Deep incised gorge, waterfalls, geomorphology.	Construct information board (table 3).
MacKillop Bridge	•	A	1.5	Snowy River and environs. Bridge history.	Construct information board (table 3).
Deddick River Walk	•	С	3**	Rainshadow woodland, Deddick River and environs.	Design and construct.
Waratah Flat (interpretive trail)	•	A,B	1.4	Montane and riparian forests, significant species, Waratah Flat, Rodger River	Design and construct high quality interpretive walk including elevated sections and a crossing at Rodger River.
Basin Creek	•	В	1	Waterfall, Snowy River.	Design and construct.
Ash Saddle	•	В	1	Mountain Ash forest.	Design and construct in association with EGFMA Plan.
Half-day walks (2-4 hours)					
Hicks Farm	O	в,с	4	Grazing, history.	Design and construct.
Accommodation Creek	•	C	4	Mining history, geological formations.	Design and construct.
Raymond Falls - Snowy River	•	С	5	Snowy River gorge, Raymond Creek, riparian habitat.	Maintain as required.

#### Table 5 (cont.)

LOCATION	STATUS*	TYPE <sup>+</sup>	LENGTH (km)	FEATURES	STRATEGY				
Day walks									
Silver Mine	•	C,D	10	Rainshadow woodland, mining history, Snowy River.	Link to MacKillop Bridge track.				
Overnight walks									
Silver Mine	•	C,D	17	Rainshadow woodland, mining history, Snowy River.	Maintain as required.				
Hicks - Jackson Crossing - Rodger River Gorge - Hicks	0	C,D	20	Rodger River, New Guinea limestone, Snowy River.	Investigate route options from Jackson Crossing to Rodger River. Design and construct.				
Hicks - West Track - Snowy River			17	Dry sclerophyll forest, Snowy River, riparian forest, Raymond Creek.	Investigate route from Hicks to West Track. Design and construct.				

Note: Within the Park there are a great variety of walking opportunities - on and off vehicular tracks, within and outside wilderness areas - which are not described above.

# \*Walking track status

O Proposed. • Existing.

## +Walking track types

- A Well-defined, surfaced and drained tracks with gentle grades. These tracks will be relatively short, well-signposted, close to other facilities and suitable access for people with limited mobility.
- B Well-defined and drained tracks, surfaced where necessary. Generally fairly short but with sections steeper than category A tracks.
- C Longer, well-defined tracks which are benched and drained only where necessary to prevent environmental degradation. Rougher than category B and may have some steep sections.
- D A vehicle track, either for management vehicles only or open to all vehicles along a defined walking route, managed to minimise its physical and aesthetic impact.
- E A track or foot pad defined through use but having no basic construction.
- \*\* Deddick River walk to include sections within Cobberas-Tingaringy Unit of Alpine National Park.

#### **Management strategies**

- Permit horse riding except in those areas listed below:
  - reference areas;
  - special protection areas;
  - wilderness areas;
  - walking tracks;
  - defined camping areas, except to gain access to horse camps;
  - the banks of the Rodger or Snowy Rivers, except for horses to cross or drink;
  - off vehicle tracks.
- Allow horse camping, where horse riding is permitted, according to the following guidelines:
  - maximum of 20 horses;
  - a maximum of two night's stay at any camp;
  - horse camping not permitted at Campbell Knob (west).
- Issue permits for commercial horse riding tours subject to conditions specified above.
- Monitor the impacts of horse riding activities in the Park to develop a detailed knowledge of facility requirements and areas used, and to help in establishing sustainable carrying capacities.
- Assess the demand for a horse trail from Orbost to Hicks and develop if the demand warrants it.

#### **5.3.7** Caving

Caves in the New Guinea area provide some potential for recreational use, but only by experienced cavers. Opportunities for public interpretation of caves and cave environments are provided at the Buchan Caves Reserve and the Murrindal tourist cave to the west of the Park. Cave access within the Park is currently unrestricted, except at New Guinea 2 where the entrance has been barred and locked to prevent disturbance to a significant archaeological site.

Insensitive use or over-use has the potential to damage sensitive cave environments and the features they contain.

#### Aim

 Provide opportunities for caving consistent with the protection of cave values.

# **Management strategies**

- Manage caves for recreation in accordance with section 3.1, Geological and landform features.
- Allow a maximum of six persons, including leaders, in any cave at one time.
- Request members of the Victorian Speleological Association, other user groups and individuals to forward copies of cave trip reports and new finds to CNR Buchan office.
- Liaise with the Victorian Speleological Association in relation to recreational caving when developing signage, or undertaking protective measures.

## 5.3.8 Rock climbing and abseiling

Rock climbing and abseiling activity in the Park is presently at a relatively low level, mainly as a function of remoteness from population centres and limited access. Little River Gorge and the gorges of the Snowy River valley provide some opportunities. In recent years climbing guide books and articles have documented locations within the Park.

A variety of plants and animals occupy and/or seek refuge in the cliffs, gorges, outcrops and escarpments. Fauna include the Brush-tailed Rock-wallaby, Peregrine Falcon, Australian Kestrel and White-bellied Sea-Eagle. There is some question regarding the impacts recreation activities may have on such species, particularly during breeding seasons.

# Aim

 Provide opportunities for rock climbing and abseiling in appropriate areas, consistent with the protection of conservation values.

#### **Management strategies**

- Encourage climbers and abseilers to forward information on rock- and escarpment-dwelling plants and animals to the CNR Buchan office.
- Liaise with climbing groups, in particular through the Victorian Climbing Club, as necessary.
- Promote the use of rock climbing techniques that are not reliant on permanent fixtures.

#### 5.3.9 Other activities

Rivers and streams adjacent to campsites are popular with swimmers through the warm summer months. Fishing is also a popular activity in some parts of the Park. Parts of the Snowy River, in the south, have been recognised as having good potential for Bass fishing.

Opportunities for bicycle riding exist, although the number of cyclists using the Park is relatively low. Touring by mountain bike is increasing in popularity, and tracks throughout the Park provide a variety of terrains. However, many roads and tracks are generally not favoured because of their steep and rough conditions.

Low-flying aircraft or the consistent presence of aircraft can detract from the enjoyment of visitors to wilderness areas although this is not a major problem at present.

## Aims

- Provide opportunities for swimming, fishing and other water-based recreation, where appropriate.
- Provide appropriate access for cyclists.
- Minimise the adverse impact of aircraft noise on park visitors.

#### **Management strategies**

 Allow fishing in all areas except reference areas or any area which may be set aside for the conservation of indigenous fish.

- Allow cycling on all vehicle tracks, except those in wilderness areas.
- Liaise with scenic flight operators and the Civil Aviation Authority as necessary to develop and encourage sensitive flight practices over the Park.

# 5.4 Visitor information, interpretation and education

The provision of information, interpretive services and environmental education will help orientate visitors, foster an understanding and appreciation of the Park features and values, influence visitor use, reduce management problems and contribute to a broader understanding of natural environments and management objectives.

Snowy River National Park offers opportunities to develop themes related to the Park's diverse environments, its remote and wild character, the ruggedness of the gorges and valleys and the pristine quality of the catchments. Information, interpretation and community education services should build on these as well as emphasise the need for minimum impact and self-reliance in undertaking activities in the Park.

Current interpretive media includes park notes, information shelters and display boards. Summer holiday programs based around MacKillop Bridge and outside the Park at Buchan, are conducted each year. These focus on organised activities such as talks, Rangerguided walks, spotlighting, Junior Ranger activities, slide shows and environmental games. They help to increase visitor appreciation of the Park and Park management, and encourage environmentally responsible behaviour.

Contact with CNR Rangers while on routine patrols and duties is a valuable source of information for visitors. However, without a formal information office in the Park, Ranger contact is generally incidental other than for organised activities.

#### Aims

- Encourage all visitors to adopt minimum impact techniques and safe practices appropriate to their activity.
- Assist visitors to discover, enjoy and appreciate the natural and cultural features of the Park, and the value of national parks, and to understand their management.

## **Management strategies**

- Develop and implement a basic Park interpretation plan, in the context of broader regional opportunities, focusing on the following themes:
  - diverse environments;
  - the remote and wild character of the Park;
  - rugged gorges and valleys;
  - pristine catchments;
  - · cultural heritage.
- Provide appropriate interpretation at important sites requiring special protection (e.g. caves).
- Provide on-site landscape interpretation signs at roadside lookouts and information boards as indicated in table 3.
- Prepare and distribute an information package for commercial tour operators providing details of the Park's natural history and management, and codes of appropriate practice.
- Prepare publications relating to areas of major visitor interest in the Park (e.g. canoeing the Snowy River).
- Provide holiday activities at periods of peak visitor demand. Programs will generally be located at MacKillop Bridge and the Buchan Caves Reserve.
- Upgrade and standardise road and track signposting throughout the Park in accordance with the CNR Signs Manual and table 1.

• Regularly assess visitor needs for, and satisfaction with, interpretive services.

# 5.5 Public safety

The challenge of meeting nature on its own terms is an important part of the experience for visitors exploring the remote areas of the Park. This should be respected when planning for visitor safety. There are no constructed facilities once the visitor leaves the main road system, making it important for Park users to be appropriately prepared and equipped prior to setting out. This is particularly true for the Snowy River where remote river-side localities are difficult to access on tracks.

The Victoria Police is responsible for search and rescue operations. Within the Park such operations would usually involve CNR, the State Emergency Service and other groups under police supervision.

#### Aim

 Promote and encourage safe practices among visitors and staff.

#### **Management strategies**

- Contribute to Displan planning for search and rescue within the Park.
- Encourage walkers and river users in remote areas to adopt the 'let someone know before you go' philosophy.
- Train Park staff in first aid and search and rescue techniques and ensure qualifications are kept up to date.
- Undertake regular inspection of facilities to ensure they are maintained in a safe condition.

## 6 COMMUNITY AWARENESS AND INVOLVEMENT

## 6.1 Friends and volunteers

Currently, a Friends of the Snowy River National Park group does not exist, although a number of groups from various backgrounds have either been involved in, or expressed interest in, participating in volunteer work. Interested groups of volunteers have the potential to make valuable contributions to several Park management projects, and their assistance will be encouraged.

#### Aim

 Encourage volunteer involvement in managing the Park.

# **Management strategies**

- Assist volunteers in forming a 'Friends' group' for the Park, and support such a group once established.
- Develop a long-term volunteer strategy for the Park which utilises the skills and interest of volunteer groups in undertaking appropriate actions from this Plan.

# 6.2 Community awareness and park neighbours

Neighbours to the Park are primarily involved in the agricultural industry and to a lesser extent the timber industry or either pursue alternative lifestyles or have developed holiday or weekend dwellings in the area.

The agricultural communities are located in isolated and remote blocks of country surrounding the western and northern sections of the Park including Buchan, W-tree, Gelantipy, Deddick and Bonang. While their main interest in the Park relates to the management of fire, pest plants and animals, many families have strong cultural and pioneer links with the country.

Other park neighbours, attracted by the natural bush setting of the area, value the recreational opportunities available the Park and are interested in maintaining the remote and undeveloped character of the Park and the surrounding area.

An emerging tourism industry is developing based on a mix of on-farm and nature-based experiences. Individuals involved in providing these experiences are seeking new ways to improve opportunities for their clients in the Park.

#### Aims

- Increase public awareness of management activities including fuel reduction burning, pest plant and animal control, and the conservation of threatened species.
- Encourage conservation and sound land management practices on private land adjoining the Park.

#### **Management strategies**

- Maintain liaison with local community groups and land holders and, as appropriate, involve them in relevant aspects of planning and management of the Park.
- Apply, and encourage the application of, the Good Neighbour Policy to management issues on or near the boundary of the Park.

#### 7 OTHER ISSUES

## 7.1 Authorised uses

#### 7.1.1 Gravel extraction

Gravel and stone is required for the construction and maintenance of roads and other facilities in the Park. Material is sought from sources close to the point of use. Current requirements are met from gravel pits and quarries inside and outside the Park (figure 5).

#### Aims

- Provide material for road construction, upgrading and facility development.
- Minimise the environmental and visual impacts of gravel extraction operations.

# **Management strategies**

- Construct new gravel pits only when an adequate assessment of alternatives outside the Park has been made and there is no source within a reasonable distance.
- Develop any new proposal in accordance with CNR guidelines, including paying particular attention to preventing the spread of Phytophthora species.

# 7.1.2 Apiculture

In accordance with LCC recommendations, apiculture is permitted within the Park. A maximum number of five bee sites is currently permitted, the locations of which are indicated in figure 5. Honey production is not permitted in reference areas or wilderness areas, or within specified distances from their boundaries.

There is concern that introduced bees, both domestic and feral, may adversely affect native flora and fauna. Bees can also be a hazard to Park users. While studies on the effects of introduced bees are limited, a conservative approach to apiculture in the Park is warranted until longer term studies establish otherwise.

#### Aim

 Allow apiculture in accordance with LCC recommendations and CNR guidelines.

## **Management strategy**

• Locate the five bee sites as needed at the potential locations identified in figure 5.

## 7.1.3 Other uses

Stream gauging stations are operated within the Park on the Snowy, Rodger and Deddick Rivers. Trigonometric stations on Mount Joan, Lightning Ridge and B/W Link Track are occasionally used by the Division of Survey and Mapping of the Department of Finance. No new installations are proposed for the Park.

There are no proclaimed training areas for military use in the Park. The area is used for navigation, survival and bushcraft exercises, based mainly around the Snowy River. The Army, State Emergency Service and Victoria Police occasionally use the Park for such training exercises.

#### Aims

- Provide for appropriate use and maintenance of existing public utilities in the Park.
- Allow for appropriate training exercises by the defence forces and emergency services.

# **Management strategy**

 Manage utilities and defence force training in accordance with CNR guidelines.

# 7.2 Boundaries and adjacent public land

Snowy River National Park shares its northern border with the Cobberas-Tingaringy unit of the Alpine National Park (figure 2). The two Parks complement one another and together provide a broad range of recreation

opportunities. To achieve more effective and efficient use of resources, the planning and management of these two Parks is being coordinated. Currently field and planning staff have responsibilities across both Parks.

The majority of the Park boundary abuts State forest (figure 2). Timber harvesting in parts of these areas is an on-going operation and has a number of implications for Park management, such as landscape, access and conservation on adjoining lands.

The LCC (1991a) has made detailed recommendations for public land water frontages along the Snowy River, which border the Park in the south. These frontages are particularly important due to the natural and recreational values of the river, as detailed in section 3.4.

The Shire of East Gippsland controls and plans for agricultural, residential, industrial or tourist developments on private property adjoining the Park. The next decade is likely to see increasing pressures from development near its boundaries.

#### Aims

- Co-ordinate planning and management between Snowy River National Park and the Cobberas-Tingaringy unit of the Alpine National Park.
- Minimise conflicts between Park management and surrounding land use, including timber harvesting in adjacent State forest.

## **Management strategies**

- Co-ordinate, where appropriate, management programs in the Alpine and Snowy River National Parks.
- Liaise with the Forest Service over activities in adjacent State forest which may impact on the Park.
- Manage public land water frontages as detailed in the Rivers and Streams Special Investigation Final Recommendations (LCC 1991), and monitor their condition to ensure that riparian vegetation is not adversely affected by grazing.
- Liaise and input into Local Government Authority planning matters that may effect the Park.

# **8 IMPLEMENTATION**

A three-year rolling implementation program will be prepared for the Park to ensure efficient implementation of this Plan. Priorities for management are identified in table 6 as an initial step in this process.

TABLE 6 PRIORITIES FOR MANAGEMENT

TABLE 0 TRIORITIES FOR MARKAGEN	
MANAGEMENT DIRECTION	SECTION IN PLAN
Resource conservation  Develop and implement active management strategies for the protection of key species and communities, in particular:	
<ul><li>Brush-tailed Rock-wallaby;</li><li>Tiger Quoll;</li></ul>	3.3 3.3
• Long-footed Potoroo;	3.3
• cave-dwelling bats;	3.3
<ul><li>multi-aged ash forests;</li><li>heathland communities;</li></ul>	3.2 3.2
• grasslands.	3.2
Protect cave and karst sites.	3.1
Survey and protect Aboriginal and European cultural sites.	3.6
Park protection	
Prepare input for the review of the Regional Fire Protection Plans.	4.1
Plan and/or construct fire dams and helipads as necessary.	4.1
Develop and implement a pest plant and animal control strategy.	4.2
Survey and map sites infected with <i>Phytophthora</i> species.  Prepare and implement an action plan for control of <i>Phytophthora</i> spp.	4.2 4.2
repare and implement an action plan for condor of r hydophinora spp.	4.2
The Park visit	
Develop and maintain visitor facilities.	5.1, 5.2, 5.3 5.3.3
Introduce camping fees at major sites.  Liaise with Park users, user groups and commercial operators.	5.2
Develop and introduce a permit system for canoeing/rafting the Snowy	3.2
River.	5.3.4
Continue to provide Park information and interpretation.	5.4
Plan and integrate the Park's walking tracks into a wider regional walking track system.	5.3.5
track system.	3.3.3
Monitoring and research	
Encourage surveys and research on threatened flora and fauna.	3.2, 3.3
Encourage research into the effects of fire and fire ecology.	4.1
Establish programs to monitor indicators of visitor impacts and management techniques, particularly at key visitor sites and in wilderness	
areas.	3.1-3.6, 5.1, 5.3
Assess visitor use and requirements at formal sites around the Park	
perimeter.	5.1, 5.3

#### **REFERENCES**

- Beardsell, C. (1986) A register of rare and endangered native plant species in Victoria. Thelymitra retecta, A. Summary. La Trobe University, Melbourne (unpub.).
- Beauglehole, A.C. (1981a) The distribution and conservation of vascular plants in the East Gippsland area, Victoria. Western Victorian Field Naturalists Association, Portland.
- Beauglehole, A.C. (1981b) The distribution and conservation of vascular plants in the Alpine area, Victoria. Western Victorian Field Naturalists Association, Portland.
- CALM (1991) A Manual on Fox Control. As commissioned by the World Wide Fund for Nature Australia. Project P106 for the purpose of conserving threatened Australian wildlife. W.A. Dept. of Conservation and Land Management, Perth.
- CFL (1989) Computerised Flora Data Base. Flora and Fauna Survey Group, Department of Conservation, Forests and Lands, Melbourne.
- CFL (1990) Regional Fire Protection Plan: Orbost Region. Department of Conservation, Forests and Lands, Melbourne.
- Cheal, D.C. (1984) A Register of Rare and Endangered Native Plant Species in Victoria. *Acacia penninervis* A. Details. La Trobe University, Melbourne (unpub.)
- Chesterfield, E.A., MacFarlane, M.A., Allen, D., Hutchinson, M.N., Triggs, B. & Barley, R. (1983) Flora and Fauna of the Rodger Forest Block East Gippsland, Victoria. Ecological Survey Report No.1. Forests Commission, Victoria.
- CNR (1993a) Snowy River National Park

  Draft Management Plan. Department of
  Conservation and Natural Resources,
  Melbourne.
- CNR (1993b) *Threatened Fauna in Victoria*. Department of Conservation and Natural Resources, Victoria.

- Davey, A.G. & White, S. (1986) Victorian Caves and Karst: Strategies for management and catalogue. Department of Conservation, Forests and Lands, Melbourne.
- DCE (1991b) Regional Fire Protection Plan: Bairnsdale Region. Department of Conservation and Environment, Melbourne.
- Forbes, S.J., Gullan P.K. & Walsh, N.G.
  (1981) Sites of Botanical Significance in
  East Gippsland. Environmental Studies
  Publ. No. 322. Ministry for Conservation,
  Melbourne.
- Govt of Vic. (1988) Far East Gippsland Tourism Strategy. VGPO, Melbourne.
- Gullan, P.K., Cheal, D.C. & Walsh, N.G. (1990) Rare or Threatened Plants in Victoria. Department of Conservation Natural Resources, Melbourne.
- LCC (1977) East Gippsland Study Area Final Recommendations. Land Conservation Council, Melbourne.
- LCC (1979) *Alpine Area Final Recommendations*. Land Conservation Council, Melbourne.
- LCC (1983) Gippsland Lakes Hinterland Area. Final Recommendations. Land Conservation Council, Melbourne.
- LCC (1985) East Gippsland Area (Review)

  Descriptive Report. Land Conservation
  Council, Melbourne.
- LCC (1986) Final Recommendations East Gippsland Area (Review). Land Conservation Council, Melbourne.
- LCC (1991a) Rivers and Streams Special Investigation Final Recommendations. Land Conservation Council, Melbourne.
- LCC (1991b) Wilderness Special Investigation Final Recommendations. Land Conservation Council, Melbourne.
- McRae-Williams, M.S., Rosengren N.J. & Kraemers, S.M. (1981) Sites of Geological and Geomorphological Significance in East Gippsland, Victoria. Environmental Studies

- Publ. No. 320. Ministry for Conservation, Melbourne.
- Norris, K.C. & Belcher, C.A. (1986) The Brush-tailed Rock-wallaby in Gippsland, 1986. Bairnsdale Region, Department of Conservation, Forests and Lands (unpub.).
- NPS (1993) National Parks and Conservation Reserves, Guidelines and Procedures Manual. National Parks Service, Department of Conservation and Natural Resources, Melbourne.
- Peel, W.D., Duncan, P.E., Gillespie, G.R. & Lobert, B.O. (in prep). Flora and Fauna of the Tabby and Snowy Forest Blocks, East Gippsland, Victoria. Ecological Survey Report No. 41. Department of Conservation and Natural Resources, Melbourne.
- Scarlett, N.H. (1983) A Register of Rare and Endangered Native Plant Species in Victoria, *Haloragodendron baeuerlenii* A. Summary. La Trobe University, Melbourne (unpub.).

- Scotts, D.J. & Seebeck, J.H. (1990) Ecology of *Potorous longipes* (Marsupialia: Potoroidae); and preliminary recommendations for management of its habitat in Victoria. Department of Conservation, Forests and Lands, Melbourne.
- Willis, J.H. (1978) 507 species of indigenous Victorian plants which are variously rare, very localised and/or endangered, with localities as far as known. Prepared for the Forests Commission, Victoria (unpub.).

#### **Personal communications**

- D. Cameron, Botanist, CNR
- P. Geary, Officer in Charge, CNR Eastern Research Centre, Orbost
- W. Peel, Botanist, CNR
- J. Turner, Bairnsdale Field Naturalists Club
- N. Walsh, Botanist, National Herbarium
- J. Westaway, Former Botanist, CNR

Appendices

I OCATION'S				ъ	D	<i>C</i>	<u> </u>	ь.	Б	г	<u> </u>	т т	т т	тт.	т	т	т	т	3.4	3.4	<b>N.</b> T	ъ	Б	ъ	С	a.			С		***	** 7	<b>X</b> 7
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1. MacKillop Bridge		X																															
2. Royal Creek		X																															
3. Little River Gorge											X				X								X	X						X			X
4. Boundary Creek											X	X			X										X								
5. Currie Creek																								X									
6. Campbell's Knob											X											X											
7. Tulloch Ard Gorge										X	X				X								X	X									
8. Ash Saddle/Betts Creek							X		X											X	X											X	
9. Breakfast Creek																															X		
10. Jackson's Crossing																															X		
11. New Guinea Bend		X		X							X				X													X					
12. Minchin Creek																							X	X	X								
13. Mount Gelantipy																								X									
14. Mount Gelantipy Creek																																X	
15. Old Yard Creek																							X										
16. West Track																															X		
17. Raymond Creek						X		X					X													X							
18. Upper Rodger River					X												X	X	X														
19. Monkey Top																				X													
20. Warbisco Track														X																			
21. Bowen Range			X													X									X		X		X				X

APPENDIX 2 THREATENED FLORA

SPECIES	COMMON NAME	STATUS*	REF.+
Acacia penninervis	Hickory Wattle	r	12
Acacia subtilinervis	Net veined Wattle	Rv	4
Adiantum hispidulum	Rough Maidenhair	r	1,3,10
Asplenium trichomanes	Common Spleenwort	r	1,9
Astrotricha crassifolia	Thick-leaf Star-hair	r	1,3
Australopyrum retrofractum	Feathery Wheat-grass	r	6
Bertya cunninghamii	Sticky Bertya	r	5
Beyeria lasiocarpa	Wallaby-bush	r	1,6,9
Beyeria viscosa	Pinkwood	r	1,9,10
Boronia ledifolia	Showy Boronia	v	1,3,4,
Brachyscome petrophila	Rock Daisy	Rr	1,2,6,8
Brachyscome riparia	Snowy River Daisy	Rr	1,2,3
Callitris glaucophylla	White Cypress-pine	d	9
Corybas hispidus	Hispid Helmet-orchid	r	4,5
Cuscuta victoriana	Victorian Dodder	r	1
Cypanthera albicans	Hoary Ray-flower	r	3,4,5
Cyperus concinnus	Flat Trim-sedge	v	4
Cystopteris filix-fragilis	Bristle-fern	Rr	4
Dampiera purpurea	Mountain Dampiera	r	1
Dendrobium striolatum	Streaked Rock Orchid	r	1,6
Desmodium brachypodum	Large Tick-trefoil	r	1,8
Deyeuxia decipiens	Devious Bent-grass	v	6
Dillwynia prostrata	Matted Parrot-pea	v	7
Dipodium hamiltonianum	Yellow Hyacinth Orchid	e	3,4
Dodonaea rhombifolia	Broad-leaf Hop-bush	Rr	3,4,6
Enneapogon gracilis	Slender Bottlewashers	v	1,2
Eucalyptus saxatilis	Suggan Buggan Mallee	Rv	1,2,5
Goodenia grandiflora	Pinnate Goodenia	r	3,4,5
Goodenia heterophylla	Variable Goodenia	r	1
Grevillea willisii	Rock Grevillea	Rr	7
Haloragodendron baeuerlenii	Shrubby Raspwort	Rr	11
Hibbertia spathulata	Rock Guinea-flower	Rr	3,4,5
Leptorhynchos elongatus	Lanky Buttons	r	1
Leucopogon microphyllus	Hairy Beard-heath	r	6
var. pilibundus			
Leucopogon riparius	River Beard-heath	Rr	3,4,5
Lindsaea microphylla	Lacy Wedge-fern	r	5

SPECIES	COMMON NAME	STATUS*	REF.+
Myoporum floribundum	Slender Myoporum	Re (l)	1,2
Phebalium glandulosum	Glandular Phebalium	r	5
Phebalium squameum coriaceum	Harsh Phebalium	Vv	4
Poa hookeri	Hooker's Tussock-grass	v	6
Pomaderris costata	Veined Pomaderris	Vr	14
Pomaderris ledifolia	Sydney Pomaderris	r	14
Pomaderris oblongifolia	Snowy River Pomaderris	r	1,7
Pomaderris pauciflora	Mountain Pomaderris	Rr	5,14
Pomaderris sericea	Bent Pomaderris	$Vv^{(l)}$	5
Prostanthera walteri	Monkey Mint-bush	Rr	1,8
Pseudanthus divaricatissimus	Tangled Pseudanthus	r	5
Psilotum nudum	Skeleton Fork-fern	r	5
Pterostylis aestiva	Long-tongue Summer Greenhood	Rr	5
Pterostylis fischii	Fisch's Greenhood	r	3,5
Pterostylis laxa	Antelope Greenhood	r	15
Pultenaea polifolia	Dusky Bush-pea	r	1,3
Salvia plebeia	Austral Sage	v	3,4
Scutellaria mollis	Soft Skullcap	r	5
Stipa setacea	Corkscrew Spear-grass	r	1
Taraxacum aristum	Austral Dandelion	Rr	1
Thelymitra circumsepta	Bog Sun-orchid	v	13
Viola caleyana	Swamp Violet	r	1
Westringia cremnophila	Snowy River Westringia	Rv	3,5
Zieria cytisoides	Dwarf Zieria	r	15
Zieria smithii	Sandfly Zieria	r	6

\*Status after Gullan et al. (1989)

Australia: E - Endangered Victoria: e - endangered V - Vulnerable R - Rare v - rare d - depleted

<sup>(1)</sup>Listed under the Flora and Fauna Guarantee Act

# +References:

CFL (1989)
 J Westaway (pers. comm.)
 Beauglehole (1981a)
 Willis (1978)

6. Peel et al.

5.

7. J Turner (pers. comm.)

8. Chesterfield et al. (1983)

Beauglehole (1981b)

9. Forbes et al. (1983)

10. D Cameron (pers. comm.)

11. Scarlett (1983)

12. Cheal (1984)

13. Beardsell (1986)

14. N Walsh (pers. comm.)

15. P Geary (pers. comm.)

# **APPENDIX 3 THREATENED FAUNA**

SPECIES	COMMON NAME	STATUS*
Mammals		
Petrogale penicillata	Brush-tailed Rock-wallaby	$E^{(1)}$
Potorous longipes	Long-footed Potoroo	$E^{(1)}$
Dasyurus maculatus	Tiger Quoll	$V^{(1)}$
Miniopterus schreibersii	Common Bent-wing Bat	C
Rhinolophus megaphyllus	Eastern Horseshoe-bat	$C^{(1)}$
Scotorepens orion	Eastern Broad-nosed Bat	Ins
Macropus robustus	Wallaroo	R
Birds		
Lophoictinia isura	Square-tailed Kite	V
Tyto tenebricosa	Sooty Owl	$R^{(1)}$
Ninox strenua	Powerful Owl	R
Neophema pulchella	Turquoise Parrot	$R^{(1)}$
Haliaeetus leucogaster	White-bellied Sea-Eagle	$R^{(1)}$
Xanthomyza phrygia	Regent Honeyeater	$E^{(1)}$
Calyptorhynchus lathami	Glossy Black-Cockatoo	V
Reptiles		
Varanus varius	Tree Goanna	Ins
Amphibians		
Heleioporus australiacus	Giant Burrowing Frog	$R^{(1)}$
Litoria citropa	Blue Mountains Tree Frog	R
Fish		
Prototroctes maraena	Australian Grayling	$V^{(1)}$
Macquaria novemaculeata	Australian Bass	R
Gadopsis marmoratus	Freshwater Blackfish	Ins
Galaxias olidus	Mountain Galaxias	Ins
Philypnodon sp. nov.	Dwarf Flat-headed Gudgeon	Ins

<sup>(1)</sup>Listed under the Flora and Fauna Guarantee Act

- E Endangered and may become extinct unless action is taken
- V Vulnerable and under considerable threat
- R Restricted distribution, rare or both
- Ins Suspected but not definitely known to belong to any of the above categories
- C Restricted colonial breeding or roosting sites

<sup>\*</sup>Status (CNR 1993b):

# **APPENDIX 4 HELIPADS AND FIRE DAMS**

				long.	lat.	
Helipad	REF.	STATUS	ZONE	148 <sup>o</sup> x"	37 <sup>o</sup> x"	ACTION
St Helena Spur	1	•	C/R	18	09	N
Museum Spur	2	•	C/R	21	18	N
New Guinea Jeep Track	3	•	C/R	21	23	N
Collings Track	4	•	C/R	32	07	N
B-W Link Track	5	•	W	28	09	N
Musk Creek Track	6	•	W	25	09	N
Mackieson Spur Track	7	•	W	25	10	N
Postman Spur Track	8	•	W	31	10	N
Mount Bowen	9	•	W	36	09	N
Mount Joan	10	•	W	28	14	N
Lightning Track	11	•	W	24	23	N
West Mountain Creek	12	<b>O</b> (H)	W	24	14	I
Moonkan Track	13	O(H)	W	23	20	I
Mountain Creek Dead-end	14	O(M)	W	35	11	I
Deddick Ridge	15	•	C/R	28	08	R
Fire Dams						
West Track North	1	•	C/R	20	27	N
West Track South	2	•	C/R	22	27	N
Lower Moonkan	3	•	C/R	22	21	N
Bowen West (2 dams)	4	•	C/R	26	08	N
Bass Camp Creek (Bowen Tk)	5	•	C/R	30	08	N
Reeds Track	6	•	C/R	35	08	N
Yalmy 1 (nth of Jersey Rd)	7	•	C/R	38	15	N
Yalmy 2 (2km nth of Waratah Flat Rd)	8	•	C/R	36	17	N
Yalmy 3 (500m nth of Waratah Flat Rd)	9	•	C/R	35	18	N
Yalmy 4 (3km sth of Waratah Flat Rd)	10	•	C/R	33	19	N
Yalmy 5 (2km nth of Deddick Trail)	11	•	C/R	31	19	N
Yalmy 6 (near Deddick Trail)	12	•	C/R	30	20	N
Yalmy 7 (2km sth of Rodger River Tk)	13	•	C/R	27	20	N
Deddick Trail 2 (sth of Rich Knob Tk)	14	⊙(Hh)	W	29	16	I
Bowen West	15	⊙(Hh)	C/R	-	-	I
Deddick Trail 1 (nth of Mackieson Spur)	16	<b>O</b> (M)	W	25	10	I
Howitt Creek Track	17	<b>O</b> (M)	C/R	20	19	I

REF: Corresponds to figure 4

STATUS: ● = Existing (current helipad/water point)

**O** = Proposed: plan but do not construct until required

• Proposed: plan and construct

 $\mathbf{H} = \text{High}$   $\mathbf{M} = \text{Medium}$   $\mathbf{Hh} = \text{Identify potential to service helitanker}$ 

ZONE: C/R = Conservation and Recreation W = Wilderness

LOCATION: Latitudes and longitudes are estimates rounded to the lower minute.

ACTION: N = Maintain as necessary, in conjunction with other operations or as required.

I = Identify most suitable location in accordance with guidelines in section 7.1.

 $\mathbf{R}$  = Allow to revegetate until required for fire emergency.











