

Lind and Alfred National Parks

August 1998



Management Plan

This 1998 plan was evaluated in 2009 and will continue to be implemented for a further five years.



This Management Plan for Lind and Alfred National Parks is approved for implementation. Its purpose is to direct all aspects of management in the Park until the Plan is reviewed. A Draft Management Plan for the area was released for public comment in May 1997. The three submissions received were considered in developing this Approved Plan.

Copies of this Plan can be obtained from:

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**LIND AND ALFRED NATIONAL PARK
MANAGEMENT PLAN**



August 1998

**This 1998 plan was evaluated in 2009 and will continue
to be implemented for a further five years.**

Published in August 1998 by Parks Victoria
387 Cotham Road, Kew, Victoria 3101.

National Library of Australia Cataloguing-in-
Publication entry

Parks Victoria.
Lind and Alfred National Parks.

Bibliography
ISBN 0 7306 6265 9

1. National parks and reserves - Victoria - East Gippsland -
Management. 2. Lind National Park (Vic.). 3. Alfred
National Park (Vic.) - I. Title.

333.783099456

Cover: Rainforest, Lind National Park

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FOREWORD

Familiar to travellers going through East Gippsland on the Princes Highway between Sydney and Melbourne, Lind and Alfred National Parks date back to the 1920s, when naturalists and Lands Department staff recognised the value and uniqueness of their rainforest vegetation and sought to protect it.

Today such values are more widely recognised in the community, and this Plan commits park managers to protecting and managing the Parks for both present and future generations. The regeneration of Alfred National Park's rich and varied natural vegetation following the 1983 wildfires will be protected from fires and pest plant invasion, and further study of the flora and fauna of both Parks will be encouraged.



Marie Tehan MP
Minister for Conservation
and Land Management

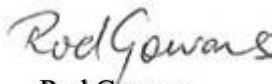
Facilities for visitors will continue to be quite low-key to help ensure the protection of these small Parks. The Euchre Valley Nature Drive in Lind National Park will be improved with better signage, and a short new walking track at the Growlers Creek picnic area will allow people stopping for a rest or picnic to explore and experience the tall forest. Facilities will not be provided in Alfred National Park. Other sites in East Gippsland, such as the Bemm River Scenic Reserve, allow visitors more readily to explore Warm Temperate Rainforest.

I look forward to community support in managing and protecting these small but significant Parks.

APPROVED MANAGEMENT PLAN

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

The Plan provides the basis for future management of Lind and Alfred National Parks. It was finalised following consideration of the three submissions received on the Draft Plan.



Rod Gowans
A/Director
National Parks



Mark Stone
Chief Executive
Parks Victoria

SUMMARY

Lind National Park and Alfred National Park became part of Victoria's park system in the 1920s in the days before there was a National Parks Act or any ranger service.

They are colloquially known as 'the highway parks'. For the past seventy years, successive generations of highway travellers have marvelled at the tall forests and tree-ferns of Lind National Park and the distinctive rainforest of the 'Drummer jungle' in Alfred National Park.

The winding gravel highway of thirty years ago allowed for easy stopping and a leisurely view of these two Parks. Modern high speed travel is less accommodating. Close contact with rainforest is now available elsewhere on East Gippsland's highway corridor, at places better suited for stopping and where new facilities are provided.

Neither Park has been developed. They remain essentially untouched and little used by visitors.

The scenic Euchre Valley Nature Drive and day visitor facilities at Growlers Creek in Lind National Park enhance travellers' and visitors' experiences. The benefits of seventy years of conservation of flora and fauna values will be continued and enhanced by better ecological management and modern monitoring systems.

Significant management directions for the Parks are summarised below.

- The Parks' old growth forest, rainforest, and significant flora and fauna communities will be protected by sensitive fire management, including the application of ecologically-based fire regimes in Lind National Park.
- Pest plant and animal control will protect the Parks' pristine environments.
- Improved day visitor facilities, including a new walking track at Growlers Creek, will be provided in Lind National Park.

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Lind and Alfred National Parks

1 INTRODUCTION

1.1 Location and planning area

Lind National Park (1370 ha) and Alfred National Park (3050 ha) are in East Gippsland adjacent to the Princes Highway. Lind National Park is 419 km from Melbourne near the small township of Club Terrace. Alfred National Park is 480 km from Melbourne to the east of Cann River. Both Parks are surrounded by large areas of State forest. The Princes Highway borders Lind National Park and bisects Alfred National Park (figures 1 and 2).

1.2 Regional context

The Parks lie within an extensive area of public land. Lind National Park borders the old Princes Highway alignment along the valley of Euchre Creek in the Park. Alfred National Park is bordered by isolated cleared farmland to the east and encloses the Mount Drummer Range, a significant landmark crossed by the Princes Highway.

Far East Gippsland is a region that is attracting an increasing number of visitors who wish to experience the area's diverse natural attractions. The Parks complement a number of other areas throughout East Gippsland which have a more remote character, but they also contrast with a variety of more developed visitor settings.

Croajingolong National Park and Cape Conran Coastal Park contain magnificent coastal environments within the regional context, while Coopracambra National Park and Errinundra National Park encompass wilderness and mountain forest environments. Apart from the developed visitor nodes in or near Croajingolong National Park, e.g. Mallacoota, these Parks focus on natural values rather than recreational facilities.

The Bemm River Scenic Reserve on the Princes Highway west of Lind National Park has been developed with walkways and bridges to allow visitors to experience a rainforest environment. This development supplants the need for development in Alfred National Park.

Croajingolong National Park lies about 20 km to the south of both Parks. Coopracambra National Park is about 30 km north of Alfred National Park. Errinundra National Park is some 40 km to the north-west. The intervening country is State forest with relatively few access routes suitable for visitors.

1.3 Significance of the Parks

Both Parks make a valuable contribution to Victoria's parks system, which aims to protect viable, representative samples of the State's natural environments. Parks also provide opportunities for visitors to appreciate these natural and cultural values, and many make important contributions to tourism.

Both Parks are assigned the IUCN Category II (National Parks) of the United Nations' List of Parks and Protected Areas. Category II areas are managed primarily for ecosystem conservation and appropriate recreation.

The Parks, early additions to Victoria's parks system, were established to protect significant botanical features. Their strategic significance has declined since the declaration of other major park areas in East Gippsland (such as Croajingolong, Coopracambra and Errinundra National Parks) in the past 20 years.

Significant features in the Parks are summarised below.

Natural values

- Significant areas of Warm Temperate Rainforest in Alfred National Park on Mount Drummer, which contain many species that are uncommon or rare in Victoria.
- A number of forest types ranging from tall Wet Sclerophyll Forest to Box Ironbark Forest within Lind National Park.
- A number of plant species near the limit of their distribution, especially within Alfred National Park.

- A range of faunal habitats likely to support a number of threatened species in both Parks.
- An imposing granitic mountain range (Mount Drummer) in Alfred National Park.

Cultural values

- Evidence of Aboriginal occupation in the form of artefact scatters on a ridge in Lind National Park.
- Evidence of gold mining in Lind National Park near Club Terrace and of a bismuth mine in Alfred National Park.

Tourism and recreational values

- The climb and descent over Mount Drummer, which was a significant obstacle to interstate highway travellers because of steep grades, high rainfall and slippery surfaces until the section was improved and sealed in the 1960s.
- The Euchre Valley Nature Drive in Lind National Park, which offers highway travellers a diversion along a very scenic corridor of the old highway alignment as well as day visitor facilities.
- A significant area of Warm Temperate Rainforest easily viewed from the Princes Highway.

1.4 Creation of the Parks

Alfred National Park was first reserved as a National Park in 1925 under the *Lands Act 1912* (Vic.) following representations from the Field Naturalists Club of Victoria.

Lind National Park (originally 1166 ha) was recommended by a Crown Lands Investigation Committee to conserve rainforest habitat and was gazetted in 1926.

The Parks were included in Schedule Two of the National Parks Act in 1975. Following recommendations from the East Gippsland Area Review (LCC 1986), Alfred National Park was expanded in area to 3050 ha, and Lind National Park to 1365 ha in 1988. Five

hectares (unused road reserve) were added to Lind National Park in 1995.

1.5 Legislation and guidelines

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

Land Conservation Council recommendations (LCC 1986) provided for both Parks to be slightly enlarged in area to rationalise boundaries and to include Warm Temperate Rainforest in the headwaters of Soda Creek within Alfred National Park. The LCC (1986) recommended that both Parks be used to:

- provide recreation and education within a natural environment;
- conserve and protect natural ecosystems;
- supply water and protect catchments and streams.

The LCC also recommended that grazing, logging, hunting and the use of firearms not be permitted.

Both Parks are managed in accordance with a range of guidelines and procedures for the management of parks, including:

- the Orbost Region Fire Protection Plan (CFL 1990);
- the Code of Practice for Fire Management on Public Land (CNR 1995a);

and with LCC recommendations.

1.6 Park management aims

Sections 4, 17 and 17a of the National Parks Act provide the main basis for management of the Parks. The following management aims are derived from those sections and as such broadly govern all aspects of park management.

Resource conservation

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

Park protection

- Protect streams and water catchments.
- Protect human life, the Parks and adjacent lands from injury by fire.
- Eradicate, or otherwise control, introduced plants, animals and diseases.

The Park visit

- Provide opportunities for appropriate recreation and tourism.

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

Other

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

2 STRATEGIC DIRECTIONS

2.1 Park vision

A future visitor to Lind National Park finds a valley of East Gippsland old growth forest relatively untouched since European settlement. The Park is being managed with an increased understanding of its diverse forest environments. Disturbance within the forested catchment of Euchre Creek has been negligible for decades. The Euchre Valley Nature Drive and Growlers Creek Picnic Area are a popular and peaceful deviation for the many tourists travelling along the Princes Highway. These visitors are able to learn about the natural values of the East Gippsland forest as they take a break from the pressures of highway driving.

Alfred National Park is recognised as one of Victoria's significant areas of Warm Temperate Rainforest. Research and monitoring continue to unveil the complex recovery of the Park environment from the effects of a major wildfire in 1983.

Both Parks feature as small but valuable parts of Far East Gippsland's nature-based tourism attractions.

Although accessible from the Princes Highway, the Parks are sensitively protected from increased visitor use and provide a standard for preservation measures within Victoria's parks system. The interests of future generations are assured.

2.2 Management directions

Major management directions for the two Parks are outlined below.

Resource conservation

- Alfred National Park will be maintained in an undeveloped condition during its recovery from the 1983 wildfire, which is expected to take some decades.
- Lind National Park will also be largely undeveloped to provide a benchmark area for old growth forest and associated flora and fauna.

Park protection

- The rainforests of Alfred National Park will be protected from fire.
- Lind National Park will benefit from the introduction of ecologically-based burning regimes.
- A pest plant and animal control strategy will be prepared.

The Park visit

- Visitor enjoyment of Lind National Park will be enhanced by improved signposting and promotion of the Euchre Valley Nature Drive to attract highway travellers.
- A new short circular walking track from the Growlers Creek Picnic Area will allow visitors to experience the tall forests and streamside attractions of Euchre Creek.

2.3 Zoning

A management zoning scheme has been developed for the Parks to:

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

Two management zones — Conservation, and Conservation and Recreation — apply to Lind National Park. A Conservation Zone applies to all of Alfred National Park and a special protection area overlays just over half of the Park to allow natural recovery from wildlife.

Table 1 specifies management zone and overlay characteristics, and the locations of these zones are shown on figures 1 and 2.

TABLE 1 MANAGEMENT ZONES AND OVERLAY

	ZONE		OVERLAY
	CONSERVATION	CONSERVATION AND RECREATION	SPECIAL PROTECTION AREA
AREA/LOCATION	<p>Lind National Park 1368 ha (96.2% of the Park)</p> <p>Alfred National Park 3050 ha (100% of the Park).</p>	<p>2 ha (3.8% of the Park) at Growlers Creek Picnic Area in Lind NP.</p> <p>-</p>	<p>-</p> <p>1709 ha (56% of the Park).</p>
VALUES	Broad areas with sensitive natural environments.	Important natural values and scope for recreational activities.	Alfred NP — Warm Temperate Rainforest (259 ha), Damp Forest (580 ha) and Wet Forest (870 ha) recovering from fire.
GENERAL MANAGEMENT AIM	Protect sensitive natural environments and provide for minimal impact recreation activities and simple visitor facilities subject to ensuring minimal interference to natural processes.	Protect less sensitive natural environments and provide for sustainable dispersed recreation activities and small-scale recreation facilities without significant impact on natural processes.	Allow natural recovery of rainforest and surrounding forest without any visitor or management impacts.

3 RESOURCE CONSERVATION

3.1 Geological and landform features

The Parks include two distinct landforms of the East Gippsland coastal plain. Lind National Park contains a good example of a steeply incised stream valley in Ordovician sedimentary rocks. The Drummer Range at Alfred National Park is a Devonian granodiorite outcrop surrounded by metamorphosed slates and sandstones, which show bismuth mineralisation in the north-east section of the Park.

The old Bismuth Mineshaft, near Treaceys Lookout in Alfred National Park, once tapped this ore body. A fault line between the granite and the Ordovician sedimentary rocks is exposed in a cutting on the Princes Highway in the Park. These two sites are of regional significance (Rosengren, McRae-Williams & Kraemers 1984).

Aims

- Protect areas of geological and geomorphological interest.
- Provide opportunities for appropriate research into, education about and appreciation of geological sites and processes.

Management strategy

- *Encourage preparation of an inventory of sites of geological and geomorphological interest in both Parks, especially the two sites of regional significance in Alfred National Park.*

3.2 Vegetation

Both Parks were originally reserved because of the distinct nature of their vegetation. Six ecological vegetation classes (EVCs) — Warm Temperate Rainforest, Damp Forest, Lowland Forest, Riparian Forest, Wet Forest and Shrubby Dry Forest (appendix I) — have been identified in the Parks (Woodgate et al. 1994). Five EVCs are recorded in Lind National Park

and six in Alfred National Park (appendix I). Native vegetation is generally luxuriant, indicating the relatively high rainfall. The rainforest on Mount Drummer in Alfred National Park is of National significance (appendices II and III). Lind National Park is an area of old growth forest types (mature dominant and senescing subdominant) within an area of East Gippsland that is predominantly regrowth of various ages.

A general survey of the vascular plants in the Parks listed 195 native species in Alfred National Park and 152 in Lind National Park (Willis 1965a, 1965b). Results of more recent surveys on rainforest have not been published (NRE in prep.) In 1983, wildfire burnt much of Alfred National Park; the vegetation now consists of the early stages of regeneration of each of the climax vegetation types listed above.

Warm Temperate Rainforest is the central feature of both Parks but was best developed in Alfred National Park before the wildfire. It is classified as 'Gallery Rainforest' and 'Warm Temperate Rainforest' of high quality (NRE in prep.) and is characterised by a closed canopy of Lilly Pilly with various lianes, a fern stratum and epiphytes. The fragmented nature of Warm Temperate Rainforest in Victoria confers importance on the management of each area. The Warm Temperate Rainforest (Far East Gippsland) community is proposed for listing as a threatened community under the *Flora and Fauna Guarantee Act 1988* (Vic.) (FFG). Alfred National Park contains Orange-blossom Orchid and Slender Tree-fern, both listed under the FFG.

The regeneration of rainforest after the 1983 wildfires now allows for an interesting comparison with 'mature' or 'climax' rainforest, a demonstration of successional stages and the recuperative ability of rainforest in the Australian environment.

Wet Sclerophyll Forest, extensive in Alfred National Park but of limited occurrence in Lind National Park, is dominated by tall eucalypts — Messmate, Mountain Grey Gum and Blue

Gum — with a characteristic tall dense understorey of Soft Tree-fern, Austral Mulberry, Hazel Pomaderris and Gippsland Waratah, and ground plants dominated by different species of ferns.

The canopy of Riparian Forest has predominantly River Peppermint and other eucalypts from Tall Open Forest and Kanooka as tall understorey.

The dominant trees of the Lowland Forest are Silvertop, White Stringybark and Mountain Gum. Significant species are listed in appendices II and IV.

The 1983 wildfires had a dramatic impact on the vegetation of Alfred National Park (section 4.1).

Aims

- Conserve native plant communities and maintain the Parks' biodiversity.
- Improve knowledge of the Parks' flora and management requirements.

Management strategies

- *Encourage surveys of vegetation, and record findings on the Flora Information System.*
- *Endeavour to protect the post-fire regeneration of indigenous vegetation types from fire and invasion by pest plants.*
- *Manage species and communities listed under the FFG (appendix II) in accordance with approved action statements.*
- *Monitor the response to the 1983 wildfire of the major vegetation types (and their fauna) in Alfred National Park to enhance future management.*
- *Integrate, where appropriate, the conservation of flora in both Parks with conservation plans for the surrounding forest areas and for flora in East Gippsland.*

3.3 Fauna

Little is known of fauna in the Parks and, except for the rainforest on Mount Drummer, no formal surveys of the Parks have been undertaken in the past 30 years.

The effects of the 1983 fire have not been studied in detail (section 3.2).

Fauna is likely to be typical of the fauna known from similar environments adjacent to the Parks, but no formal wildlife surveys of the Parks have been conducted. A total of 36 species of mammals, 167 of birds, 22 of reptiles and 14 of amphibians have been recorded in the vicinity of the Parks (NRE database 1998b; Gillespie et al. 1993); most of these would occur in the Parks. Significant species are listed in appendices II and V.

Pockets of Warm Temperate Rainforest characteristically have a distinct bird community. Resident species include the Brown Warbler and Lewin Honeyeater, and in summer the Black-faced Monarch and Rufous Fantail.

The Parks are too small to provide a stand-alone environment that would guarantee the conservation of resident species. Breeding pairs of Powerful Owls are estimated to require about 900 ha (Possingham 1991).

Aims

- Conserve fauna species and communities and maintain the Parks' biodiversity.
- Improve knowledge of the Parks' fauna and management requirements.

Management strategies

- *Adopt a systematic approach to fauna inventory, using Park staff and outside voluntary assistance, e.g. from education institutions (section 6.1).*
- *Record survey findings on the Atlas of Victorian Wildlife.*
- *Manage species and communities listed under the FFG in accordance with approved action statements.*

- *Integrate, where appropriate, the conservation of fauna in both Parks with conservation plans for the surrounding forest areas and fauna in East Gippsland.*

3.4 Landscape

Both Parks are enclosed within the foothill forests of Far East Gippsland. Although Lind National Park has similar landscape to the larger areas of forest surrounding it, Alfred National Park and the Drummer Range are distinctive. The intimate forest landscape along the Euchre Creek is a feature of the Euchre Valley Native Drive. Alfred National Park offers significant views across the forested ranges to the south. The texture of rainforest in Alfred National Park is also an important landscape element to highway travellers, after many kilometres of travel through foothill forest. The views of rainforest valleys and distant ranges are fleeting, caught in glimpses as the highway negotiates the steep side of the Drummer Range.

There could be some potential impact on Alfred National Park landscape values if the adjacent freehold land on the east side were developed or cleared, but this is unlikely in the near future. Lind National Park has a cleared transmission line easement on the northern boundary in a rarely visited section of the Park. Future upgrading or widening of the Princes Highway could pose a significant threat to the landscape values of both Parks. Alfred National Park is particularly vulnerable in this respect.

Aims

- Protect or enhance scenic qualities in both Parks.
- Seek to minimise the visual impact of the highway and the development of adjoining lands.

Management strategies

- *Minimise impacts from maintaining and signposting the Euchre Valley Nature Drive and from developing the proposed walking track at Growlers Creek.*

- *Liaise with VicRoads to ensure input into any future proposals for highway upgrading or widening from the concept stage.*

- *Liaise with the Forests Service and East Gippsland Shire to minimise the impacts of any developments or activities adjacent to either Park which may affect landscape values in the Parks.*

3.5 Cultural heritage

The Park areas are thought to have been important for the Krauatungalung group of the Kurnai people.

An archaeological survey report (Mullett 1992) for Lind National Park recorded two artefact scatters, both on ridge tops in the Park. There has been no survey work within Alfred National Park. Evidence of Aboriginal activity is more likely to be found following fire or clearing, which may reveal sites normally covered by litter and ground vegetation.

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

Lind National Park has a history of mining activity indicated by numerous mine shafts and relics at Olive Branch mine (on Olive Branch Creek). The Park is adjacent to Club Terrace township, which owes its establishment to gold mining in the 1890s. The first mine reef in this area, called the Ace of Clubs, was opened by W. Mustard.

The Princes Highway originally passed through Club Terrace and along the Euchre Creek Valley (now the Euchre Valley Nature Drive) but this alignment was rerouted along the southern boundary of the Park in the 1960s. A Forests Commission Victoria construction camp was located in the eastern part of the Park during this period, but only a clearing now remains.

There is little evidence of European settlement in Alfred National Park apart from the cleared

farmland (Rankins) on the eastern boundary. An untouched rainforest section of this property was purchased for inclusion in the Park in the 1970s. The Bismuth Mine near Treaceys Lookout is a single mine shaft about 10 m deep from which Bismuth ore was mined earlier this century before the Park was declared.

Both Parks are among the earliest national parks established in Victoria (section 1.4).

Aims

- Identify, protect, and where appropriate interpret, cultural and historic sites.
- Improve knowledge and understanding of Aboriginal culture and other past land use activities.

- Encourage Aboriginal involvement in the management of the Parks.

Management strategies

- *Encourage oral history research into Aboriginal use and associations with the Parks.*
- *Identify, protect and manage Aboriginal sites within the Parks in accordance with Parks Victoria guidelines and with local Aboriginal communities and Aboriginal Affairs Victoria.*
- *Survey any areas subjected to fire or clearing for Aboriginal sites and relics.*
- *Ensure that any new sites are recorded on the cultural sites register and that their significance is assessed.*
- *Instigate appropriate management actions to protect significant historic places in accordance with Parks Victoria guidelines.*

4 PARK PROTECTION

4.1 Fire management

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

Current fire protection measures are in accordance with the Orbost Region Fire Protection Plan (CFL 1990). This plan sets out burning regimes for protection purposes, including areas not to be burnt. Fuel reduction burning in areas of rainforest is to be avoided. Both Parks are covered by Priority 4 burning zones (which may be burnt for ecological purposes). The State forest area north-west of Alfred National Park is Priority 1 burning zone, which provides a fuel reduced buffer to this Park on its most vulnerable north-west aspect.

Alfred National Park was almost entirely burnt in the major 1983 wildfires. The rainforest associations in the Park are still recovering (section 3.2). Protection of eucalypt forests and the rainforest from further fire is critical during the recovery period.

Lind National Park has not been subject to any major fire for at least 30 years. Fuel reduction burning (except near Club Terrace) has been minimal, and fuel loads within this Park are high as a result.

Fire intensity and frequency is a major influence on the development and perpetuation of vegetation communities. An ecologically-based burning regime drawing on current fire ecology research is required. Many of the strategies for fire protection and ecological burning are complementary and can be integrated for maximum benefit.

The highway easements through Alfred National Park and abutting Lind National Park require measures for the safety of highway travellers during wildfire situations (section 7.1). The highway easements are a potential point source for wildfires which could threaten the Parks.

Aims

- Protect human life, property and park values from damage by fire.
- Minimise the adverse effects of fire and fire suppression operations.
- Establish, implement and maintain fire regimes appropriate to the vegetation communities and fauna in both Parks.

Management strategies

- *Endeavour to exclude fire from rainforest and eucalypt, wet sclerophyll and riparian forests in both Parks.*
- *Undertake fire suppression measures, including prescribed burning, in accordance with the Orbost Region Fire Protection Plan (CFL 1990) and the Code of Practice for Fire Management on Public Land (CNR 1995a).*
- *Publicise and enforce fire regulations and restrictions on the role and use of fire within the Parks.*
- *In conjunction with Fire Management Branch, NRE, maintain a strategic track system in both Parks for fire access purposes, and improve signposting of tracks for fire suppression purposes, especially in Alfred National Park.*
- *Give preference to using the following suppression methods whenever practicable:*
 - *use of hand tools and aerial suppression;*
 - *use of existing roads and tracks, and natural features, as control lines;*
 - *backburning;*
 - *allowing wildfires to burn out to appropriate control lines, outside of main fire danger periods and where conditions allow.*
- *Rehabilitate fire control lines and other disturbances resulting from fire suppression activities as soon as possible after the fire.*

- *Allow burning for ecological purposes only where it can be established that such action is necessary for the conservation of a significant population or community and in accordance with an approved species or vegetation community management plan.*
- *Co-ordinate burning in the Priority 4 burning zone to meet ecological requirements and to achieve both ecological and fuel reduction benefits.*
- *Improve understanding of fire regimes and management techniques through monitoring and research. Ensure that this information is included in ecological fire management strategies, and in the review of the Fire Protection Plan, giving consideration to park management objectives.*

4.2 Pest plants and animals, and diseases

Exotic plants and animals are a significant threat to the survival of indigenous ecosystems. At present, the impact of exotic plants and animals in the Parks is minor.

Pest plants are found predominantly along roadsides and in other areas that have been grossly disturbed. Pest plants establish best on bare soil in full sunlight such as river banks, roadsides and picnic areas. Woody weeds, for example the Blackberry, pose the greatest threat, although herbaceous weeds like Spear Thistle, Brown-top Bent and White Clover are more extensive.

Pest animals include rabbit, fox, wild dog, pig, house mouse, black rat and cat; these species have an adverse impact on native flora and fauna in the Parks. Predation from foxes and cats on ground-dwelling small mammals like bandicoots and potoroos is of concern.

No Cinnamon Fungus has been recorded in the Parks. It has been recorded in forests south of the Princes Highway in East Gippsland and has the potential to spread to the Parks.

Aims

- Eradicate or control pest plants and animals.

- Minimise the impact of control programs on indigenous flora and fauna.

Management strategies

- *Carry out an annual, late spring surveillance and eradication of pest plants along roadsides and in other areas with major soil disturbance (section 7.1).*
- *Develop and implement a pest animal control program in the Parks (section 6.2).*

4.3 Soil conservation

Both Parks are in areas of high rainfall. Alfred National Park receives on average more than 1200 mm/year; Lind National Park about 1100 mm/year. Heavy rainfall depressions off the east coast can develop throughout the year. Total 24-hour falls exceeding 76 mm occur more often here than anywhere else in Victoria (LCC 1985). Rapid rises in streams and water flow drainage lines can cause slumps in batters on roads, blocked culverts and uprooted trees. The granitic soils of Alfred National Park are especially prone to water-induced erosion and slumps after heavy rainfall. Lind National Park is less susceptible and batters are generally more stable, although considerable soil movement could occur on areas exposed by wildfire.

Aim

- Reduce water-induced erosion within the Parks and along highway easements.

Management strategies

- *Ensure that adequate drainage and erosion control measures are used during the maintenance of Park access tracks.*
- *Liaise with VicRoads about erosion control measures on highway easements through or adjoining both Parks, in particular regarding stabilising batter banks in Alfred National Park.*

5 THE PARK VISIT

5.1 The Park visitor

Both Parks are about six hours' drive from the urban areas of Melbourne and Canberra. Neither Park is likely to be a sole destination for any tourist or Park visitor from outside the East Gippsland region. Rather, they form part of a series of attractions along the Princes Highway between Lakes Entrance and the south coast of New South Wales. There are no current visitor figures for either Park but probably about 3–4000 people visit Lind National Park each year. Fewer stop at Alfred National Park.

The typical Park visitor may spend as little as a few minutes or up to an hour in these Parks as a break in travel along the Princes Highway. These visitors are more likely to use the Parks as a rest stop than to explore their natural features. The Euchre Valley Nature Drive through Lind National Park offers a change from highway travel and a safe place to stop.

Providing for the visitor

Day visitor facilities will be provided only in Lind National Park. Signage along the Euchre Valley Nature Drive will be improved and a new walking track constructed at Growlers Creek Picnic Area.

No new facilities are planned for Alfred National Park, although well-equipped walkers may use the fire access track from the highway to reach Treacey Lookout and Granite Peak (a climb of about 330 m over about 4 km).

The Parks (particularly Lind) will continue to give travellers opportunities for short rest breaks in natural settings. As nature-based tourism in Far East Gippsland develops, the Parks have the potential to become attractions in their own right.

An opportunity to experience Warm Temperate Rainforest on foot is available at the Bemm River Scenic Reserve, west of Lind National Park.

Aim

- Provide for visitors in accordance with the above overview of future management for visitors.

Management strategies

- *Provide and maintain facilities and services which highlight, but are in keeping with, the distinctive character of Lind National Park.*
- *Encourage all visitors to adopt minimal impact techniques, including taking rubbish away with them, and to adhere to codes of conduct appropriate to their activity.*
- *Monitor visitor numbers and use to ensure adequate provision of facilities consistent with types and levels of use.*
- *Permit recreational activities in accordance with table 2.*

5.2 Visitor recreation activities and facilities

5.2.1 Access

The Princes Highway runs through or along the edge of both Parks. The highway easement is generally 60 m wide, although some portions in Alfred National Park are up to 100 m wide. The easement is not part of the respective Parks. The Combienbar Road borders the western boundary of Lind National Park (outside the Park). These roads are high speed bitumen. There are safety considerations in relation to stopping and parking (section 5.5).

Away from the major bitumen roads, the Euchre Valley Nature Drive, an East Gippsland Shire road, is a scenic forest drive suitable for all vehicles including caravans and trailers (section 7.1).

TABLE 2 SUMMARY OF RECREATION ACTIVITIES

ACTIVITY	MANAGEMENT ZONE		OVERLAY
	CONSERVATION	CONSERVATION AND RECREATION	SPECIAL PROTECTION
Picnicking	No	Yes	No
Camping	No	No	No
Walking	Yes	Yes	Yes
Bicycle riding	YC (5.2.1)	YC (5.2.1)	No
Horse riding	No	No	No
Nature observation	Yes	Yes	Yes
Dogs*	No	No	No
Firewood collection	No	Yes	No
Pleasure driving	NA	YC (5.2.1)	NA
4WD touring	NA	YC (5.2.1)	NA
Orienteering/Rogaining	No	No	No
Rock climbing/Abseiling	No	No	No
Fishing	NA	NA	NA

* Dogs allowed on highway easements outside the Parks.

Yes Appropriate
 No Not appropriate
 YC Conditional – refer to relevant section for details
 NA Not applicable

Steep 4WD tracks along the Parks' perimeter (mostly outside the Parks) link into the adjoining State forest road networks. These tracks offer limited opportunities for 4WD touring. Navigation is difficult, tracks are traffickable only in dry weather, views are restricted and the tracks do not lead to key destinations. Part of De Ross Shortcut, which cuts through Lind National Park, has been realigned along the boundary to provide alternative access.

Aims

- Provide public vehicle access in Lind National Park only.

- Maintain appropriate access for management purposes in both Parks.

Management strategies

- *Improve signposting and promotion of the Euchre Valley Nature Drive (section 5.3).*
- *Maintain boundary tracks for public and management use at 4WD dry weather only standard.*
- *Maintain fire access tracks at 4WD dry weather only standard.*
- *Close the former alignment of De Ross Shortcut which cut through Lind National Park (figure 1).*

- *Allow bicycles on all vehicle roads and tracks, but not on walking tracks.*
- *Improve the road corner at Club Terrace leading to the Euchre Valley Nature Drive, including earthworks and signposting.*

5.2.2 Day visits

There are a picnic table, fireplace and toilet at Growlers Creek in Lind National Park. These facilities are adequate for present levels of use. The addition of the walking track will enhance this stopping point for off-highway travellers. No facilities will be provided in Alfred National Park.

Highway stopping points are designated on the Princes Highway at Brightlight Saddle (Lind National Park) and Governors Bend (Alfred National Park) although these sites are technically outside the respective Parks. Both are well used (estimated 20 000 stops/annum for each) but only for checking loads or minor travel breaks. There are no significant Park features at either site (section 5.5).

Aim

- Provide day use facilities at Lind National Park only.

Management strategies

- *Maintain existing facilities at Growlers Creek in Lind National Park.*
- *Provide a small walking track circuit (100 m) from Growlers Creek Picnic Area along Euchre Creek in Lind National Park.*
- *Allow fires only in the fireplace provided.*

5.3 Visitor information, interpretation and education

A leaflet for Euchre Valley Nature Drive (Lind National Park) is currently provided; this could be supplemented by on-site signs to ensure that information is available to all visitors. No information is available on Alfred National Park. The route of the Princes Highway over the Drummer Range is one of the most

distinctive sections of the highway between Cann River and New South Wales. There is potential to interpret this Park to the highway traveller in regional tourist brochures.

Aims

- Enhance visitors' enjoyment and understanding of the Parks' natural and cultural values.
- Provide information to visitors on facilities, permitted activities and regulations.

Management strategies

- *Improve signposting at the Combienbar and Lind Park Road highway turn off points to indicate distance, time and facilities along the Euchre Valley Nature Drive.*
- *Investigate supplementing the Euchre Valley Nature Drive leaflet with on-site signs.*
- *Promote park values and visitor attractions in regional tourist brochures and interpretative programs at key visitor locations.*
- *Provide information on the Parks at regional and local Information Centres.*

5.4 Commercial tourism operations

Neither Park is used by commercial operators at present, apart from brief visits along Euchre Valley Nature Drive en route to other destinations.

Highway access makes both Parks attractive as stopping points for nature-based tours within the region, especially those using the well-interpreted Euchre Valley Nature Drive.

Aim

- Provide opportunities for commercial tourism services consistent with park management objectives.

Management strategies

- *Inform tourist operators of the possibilities for commercial tourism in both Parks, focusing on nature-based tourism opportunities in Lind National Park.*
- *Ensure that current information about the Parks is available to tour operators.*
- *Encourage appropriate commercial tour operations, and ensure that they comply with the Park Regulations and guidelines.*

5.5 Public safety

The main element of public safety in the Parks is the danger of high speed vehicles on the Princes Highway conflicting with Park visitors wishing to stop and examine the Parks (section 5.2.1).

Heavy rainfall and poor road conditions can reduce safety margins along the Euchre Valley Nature Drive. The rainforest areas of the

Drummer Range are surprisingly difficult to negotiate on foot and can tax the navigation skills of experienced walkers. No major search and rescue has ever been required.

The shaft of the Bismuth Mine in Alfred National Park could pose a threat to visitors as it is immediately on the edge of the Bismuth Mine Track.

Aims

- Promote safe use of the Parks.
- Make Park staff available to assist in search and rescue situations.

Management strategies

- *Liaise with VicRoads regarding safety of travellers on the Princes Highway.*
- *Assess and implement safety measures for Bismuth Mine shaft (Alfred National Park).*

6 COMMUNITY AWARENESS AND INVOLVEMENT

6.1 Community awareness and Park neighbours

There is little rationale for 'Friends' groups for the Parks given their distance from significant numbers of neighbours and sizeable population centres.

The small town of Club Terrace near Lind National Park has reduced in size with the sawmill closure. Residents, now numbering about 70, occasionally use Growlers Creek Picnic Area. The Club Terrace store acts as a source of information on roads and directions to the Parks.

Alfred National Park has no community associations. Both Parks would benefit from the attention of volunteer groups, especially those associated with biological monitoring and survey activities.

Aims

- Increase local community awareness of the Parks.

- Encourage sound management practices on private land adjoining Alfred National Park.

Management strategies

- *Liaise with local community groups and land owners at Club Terrace and Karlo Creek (east of Alfred National Park) and, as appropriate, involve them in relevant aspects of promoting, planning and managing the Parks.*
- *Apply, and encourage the application of, the Good Neighbour Policy to management issues on or near the boundaries of both Parks, e.g. regarding control of pest plants and animals.*
- *Encourage volunteer involvement, especially in the biological survey field, by initiating field camps and other activities.*

7 OTHER ISSUES

7.1 Authorised uses, boundaries and adjacent uses

There are no authorised uses in either Park. Lind National Park is bordered on the north and east side by an Eastern Energy powerline easement, which except for a short section near the eastern boundary is not in the Park. This line is kept relatively clear of vegetation and forms a useful fire break. Eastern Energy has no plans to expand power lines on this section (G. Downes, pers. comm. 1996).

The proposed Longford-Sydney Gas pipeline will also follow this easement.

The section of highway over Mount Drummer was widened and sealed in the 1960s. National park supporters complained of insensitive and damaging road construction by the Country Roads Board within the Park. As a result, drainage and batter treatments along the new section were improved.

Although the Euchre Valley Road reserve is not included in the reservation of Lind National Park, it is maintained by Parks Victoria, not the East Gippsland Shire (sections 3.5 and 5.2.1).

The Parks are surrounded by State forest except for some privately owned land used for farming adjacent to Alfred National Park (figure 2).

There are two gravel pits, Soda Creek and Dingo Creek, immediately on the boundary of Alfred National Park. Neither pit drains into Park catchments and both are currently being systematically worked out and rehabilitated by NRE.

Aim

- Minimise the impacts of activities on adjacent land on the natural values of the Parks.

Management strategies

- *Liaise with Eastern Energy and BHP about easement access for maintenance purposes.*
- *Seek to include the easement of Euchre Valley Nature Drive within the Lind National Park reservation.*
- *Liaise with VicRoads and East Gippsland Shire about road maintenance, pest plant and animal control, and fire management on the highway easements (section 4.3).*
- *Liaise with the Forests Service and Shire of East Gippsland about boundary and relevant statutory planning issues.*
- *Ensure that the operations of the Dingo Creek and Soda Creek gravel pits just outside Alfred National Park do not affect park values.*

8 IMPLEMENTATION

A three-year rolling implementation program will be prepared for the Parks to ensure efficient implementation of this Plan. Priorities for management are identified in table 3 as an initial step in this process.

TABLE 3 PRIORITY MANAGEMENT STRATEGIES

MANAGEMENT STRATEGIES	SECTION IN PLAN
<p>Resource conservation Consider ecological burning strategies in the review of Fire Protection Plan. (Lind and Alfred National Parks)</p>	4.1
<p>Park protection Endeavour to protect rainforest and eucalypt forest areas from fire. (Lind and Alfred National Parks)</p>	3.2, 4.1
<p>Undertake pest plant control. (Lind and Alfred National Parks)</p>	4.2
<p>Develop and implement pest animal program. (Lind and Alfred National Parks)</p>	4.2
<p>The Park visit Improve signposting and promotion of Euchre Valley Nature Drive. (Lind National Park)</p>	5.2.1, 5.3
<p>Monitoring and research Monitor recovery of the forests from fire. (Alfred National Park)</p>	3.2
<p>Encourage systematic biological surveys. (Lind and Alfred National Parks)</p>	3.2, 3.3
<p>Other Liaise with VicRoads and the East Gippsland Shire about highway easement issues. (Lind and Alfred National Parks)</p>	3.4, 4.3, 5.2.1, 5.5, 7.1

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APPENDIX I ECOLOGICAL VEGETATION CLASSES

EVC	PARK	HABITAT	CHARACTERISTIC	OR DOMINANT SPECIES	GROUND LAYER
			OVERSTOREY	SHRUB LAYER	
32 Warm Temperate Rainforest	Both	In fire protected niches such as gullies and south-facing slopes. Soils well developed with high organic content.	Lilly-Pilly, Sweet Pittosporum, Mutton-wood, Yellow-wood, Kanooka or Eastern Leather-wood. Woody lianes common.	Prickly Coprosma, Large Mock-olive and wiry climbing vines.	Soft Tree-fern, Rough Tree-fern, Shiny Shield-fern, Jungle Brake, Downy Ground-fern, Mother Shield-fern.
29 Damp Forest	Both	Range of soils and aspects.	Mountain Grey Gum, Messmate and Yellow Stringybark.	Blackwood, Frosted Wattle, Blanket-leaf, Musk Daisy-bush.	Rough Tree-fern, False Bracken, Gristle Fern
16 Lowland Forest	Both	Tertiary geology on lowland plains and coastal hills into dissected hinterland.	Large diversity of Eucalypts, depending on site, including Silvertop Ash, Red Iron-bark and Mountain Grey Gum.	Holly Lomatia, Blue Dampiera, Shrubby Platysace, Broom Spurge, Hairy Pink-bells, Hairpin Banksia, Silver Banksia and Bushy Hakea.	Thatch Saw-sedge, Curly-wig, Mat-lily, Small Grass-tree, Leafy Purple-flag, Austral Bracken.
18 Riparian Forest	Both	Along larger creeks and river flats where soils are usually Quaternary alluviums of various grades.	Manna Gum, River Peppermint and Bangalay	Blackwood, Black Wattle and Burgan. Kanooka, Lilly-Pilly and Mutton-wood.	Fishbone Water-fern, Downy Ground-fern, Common Maidenhair fern. Weeping grass, Basket Grass.
30 Wet Forest	Both	Variety of landforms; gullies, south facing slopes, escarpments, and plateaus where rainfall is high.	Shinning Gum, Cuttail, Messmate, Mountain Ash and Manna Gum.	Silver Wattle, Blackwood and Frosted Wattle. Austral Mulberry, Musk Daisy-bush, Hazel Pomaderris, Blanket Leaf	Hard Water Fern, Mother Shield-fern, Mother Spleenwort and Bat's-wing Fern.
21 Shrubby Dry Forest	Alfred	Ridges and western or northern slopes in high rainfall zones, to eastern/southern aspects and gullies in low rainfall zones.	Red Stringybark, Yertchuk, Red Box, Brittle Gum, Silvertop and White Stringybark.	Shinning Cassinia, Pale Hickory Wattle, Sunshine Wattle, Cluster Flower, Geebung.	Hop Bitter-pea, Gorse Bitter-pea, Common Heath

APPENDIX II SIGNIFICANT FLORA AND FAUNA

SPECIES/COMMUNITY	SIGNIFICANCE	COMMENTS/SOURCE
Mount Drummer Rainforest	National	Comparative analysis of rainforest communities (Cameron 1992)
Fauna		
<i>Miniopterus schreibersii</i> Bent-wing Bat	FFG	Recorded by Gillespie et al. (1993) in the adjoining Drummer forest block.
<i>Potorous longipes</i> Long-footed Potoroo	FFG	No confirmed sightings in either Park although a jaw was collected on nearby Thurra Walk (Gillespie pers comm.)
<i>Ninox strenua</i> Powerful Owl	FFG	Recorded by Gillespie et al. (1993) in the adjoining Drummer forest block.
<i>Tyto tenebricosa</i> Sooty Owl	FFG	Recorded by Gillespie et al. (1993) in the adjoining Drummer forest block.
Flora		
<i>Cyathea cunninghamii</i> Slender Tree-fern	FFG	Alfred National Park. Willis (1965a). Wakefield (1942). Recorded by Gillespie et al. (1993) in the adjoining Drummer forest block.
<i>Sarcochilus falcatus</i> Orange-blossom Orchid	FFG	Alfred National Park. Willis (1965a). Recorded by Gillespie et al. (1993) in the adjoining Drummer forest block. Population has been studied for some time.

FFG Listed under Schedule 2 of the Flora and Fauna Guarantee Act.

APPENDIX III SITES OF BOTANICAL SIGNIFICANCE

SITE	SIGNIFICANCE	REFERENCE
Mount Drummer Rainforest	National	NRE in prep; Forbes, Gullen & Walsh (1981)

APPENDIX IV RARE OR THREATENED FLORA

SCIENTIFIC NAME	COMMON NAME	STATUS	REFS.
<i>Caladenia flavovirens</i>	Summer Spider-orchid	r	FIS
<i>Cyathea cunninghamii</i>	Slender Tree-fern	r, FFG	*G, W1, W2
<i>Cyathea leichhardtiana</i>	Prickly Tree-fern	v, FFG	FIS
<i>Cyathea X marcescens</i>	Skirted Tree-fern	r	FIS
<i>Korthalsella rubra</i>	Jointed Mistletoe	v	FIS
<i>Lindsaea microphylla</i>	Lacy Wedge-fern	r	FIS
<i>Plectorrhiza tridentata</i>	Tangle Orchid	r	FIS
<i>Pterostylis grandiflora</i>	Cobra Greenhood	r	R
<i>Sarcochilus falcatus</i>	Orange-blossom Orchid	e, FFG	*G, W1
<i>Solanum brownii</i>	Violet Nightshade	v	FIS
<i>Tmesipteris ovata</i>	Oval Fork-fern	r	FIS

Status:

e	- endangered
r	- rare
v	- vulnerable
FFG	- listed under Schedule 2 of the Flora and Fauna Guarantee Act

References:

G	- Gillespie et al. (1993)
W1	- Willis (1965a)
W2	- Wakefield (1942)
FIS	- Flora Information system (NRE database 1998a)
R	- NRE (in prep.)
*	- records within 10 km of Alfred National Park

APPENDIX V THREATENED FAUNA

SCIENTIFIC NAME	COMMON NAME	STATUS	REFS.
<i>Potorous longipes</i>	Long-footed Potoroo	End, E, L	*G <i>Dasyurus</i>
<i>maculatus</i>	Spot-tailed Quoll	End, L	*G <i>Miniopterus schreibersii</i>
Common Bent-wing Bat	Vul, L	*G	<i>Canis latrans dingo</i> Dingo
DD	*G		
<i>Tyto novaehollandiae</i>	Masked Owl	End, L	N
<i>Tyto tenebricosa</i>	Sooty Owl	Vul, L	*G, N
<i>Ninox strenua</i>	Powerful Owl	End, L	*G, N

Status (NRE 1998):

End	- endangered in Victoria
E	- endangered in Australia
DD	- data deficient - insufficiently known in Victoria
L	- listed under Schedule 2 of the Flora and Fauna Guarantee Act
Vul	- vulnerable in Victoria

References:

G	- Gillespie et al. (1993)
N	- NRE database (1998b)
*	- recorded within 10 km of Lind and Alfred National Parks, in some cases as predator remains.

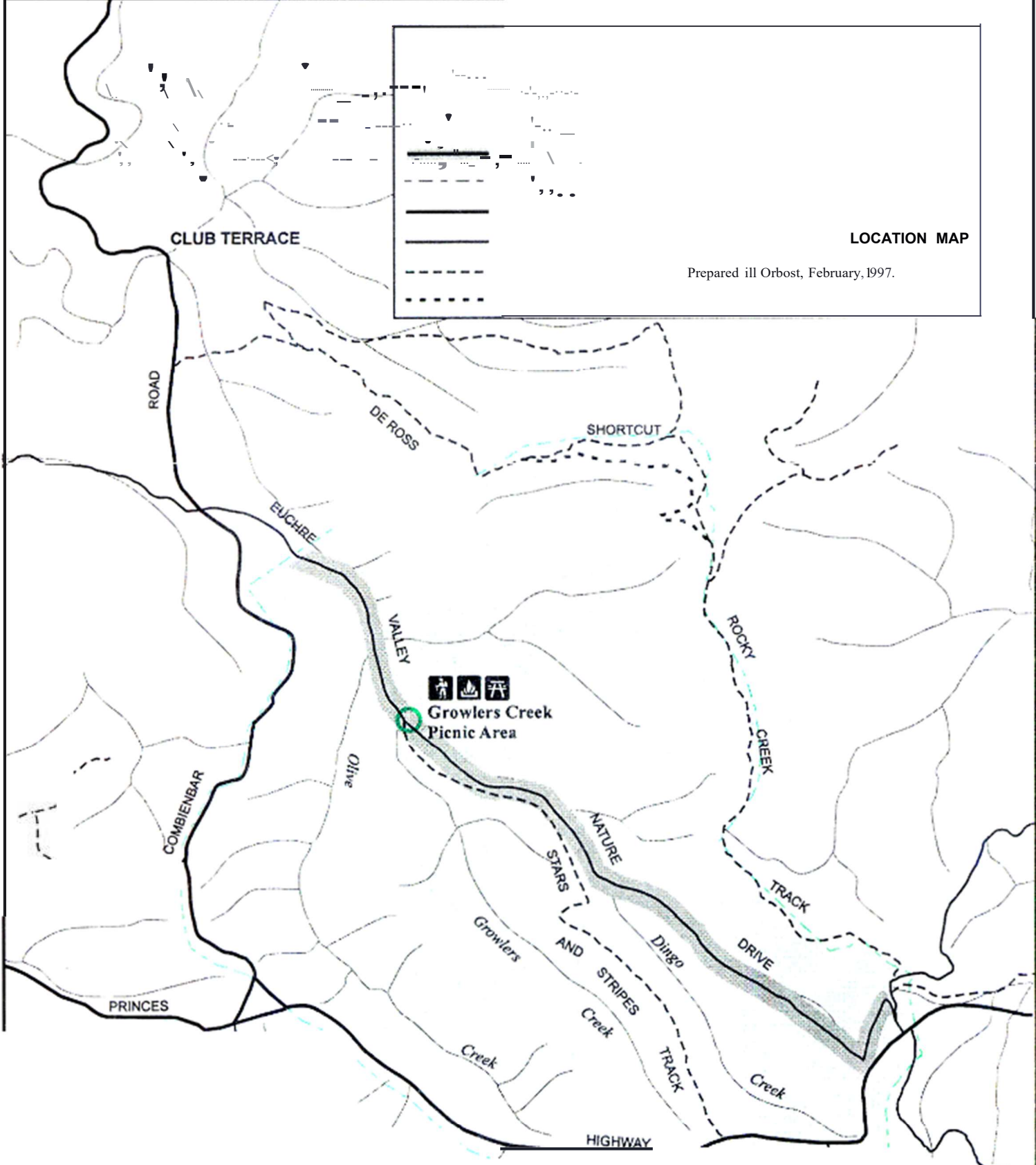
Figure 1 LIND NATIONAL PARK

0 2km

- Shire Road Easement
- Park Boundary
- Sealed Road
- Unsealed Road
- Vehicle Track 4x4
- Road Closed

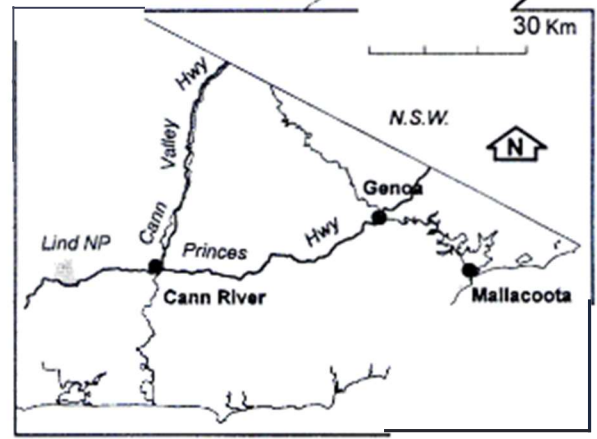
- Conservation Zone
- Conservation and Recreation Zone (Growlers Ck Picnic Area)
- Proposed Walking Track
- Picnic Table
- Fireplace





LOCATION MAP

Prepared in Orbost, February, 1997.



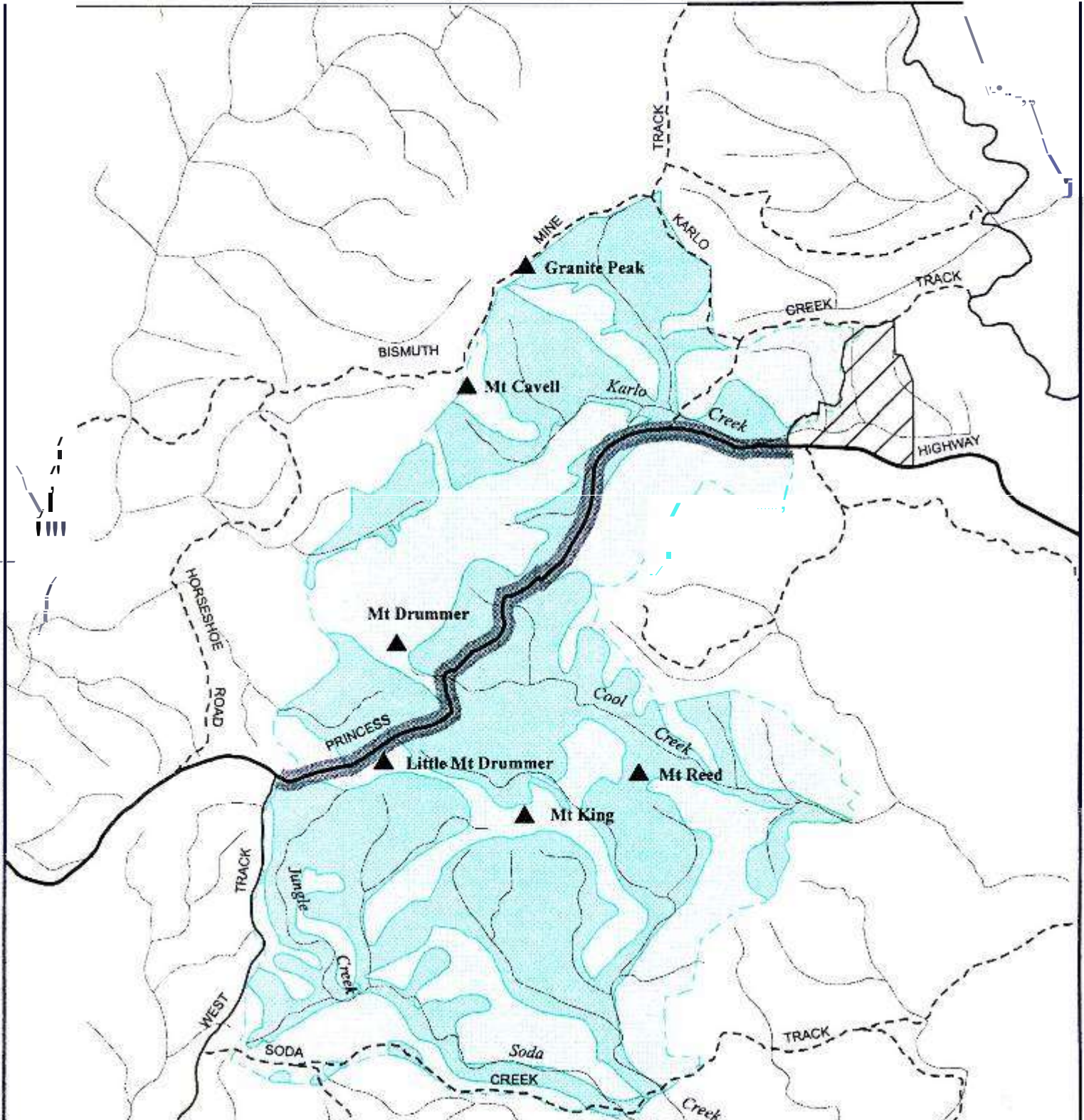



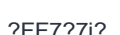



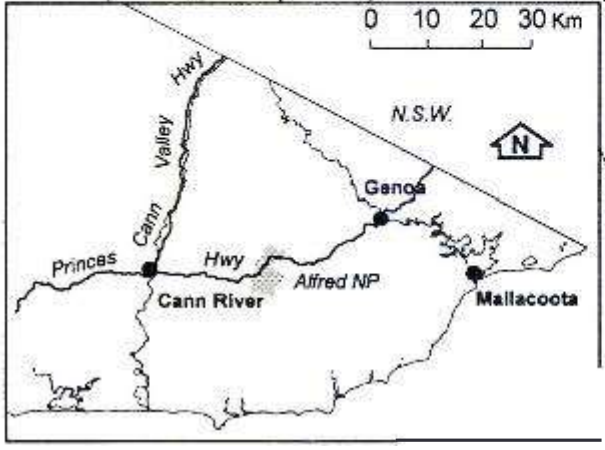


Figure 2 ALFRED NATIONAL PARK



-  Conservation Zone
-  Special Protection Area
-  Private Property
-  Vic Roads Easement
-  Park Boundary
-  Sealed Road
-  Unsealed Road



LOCATION MAP

Vehicle

Track4WD