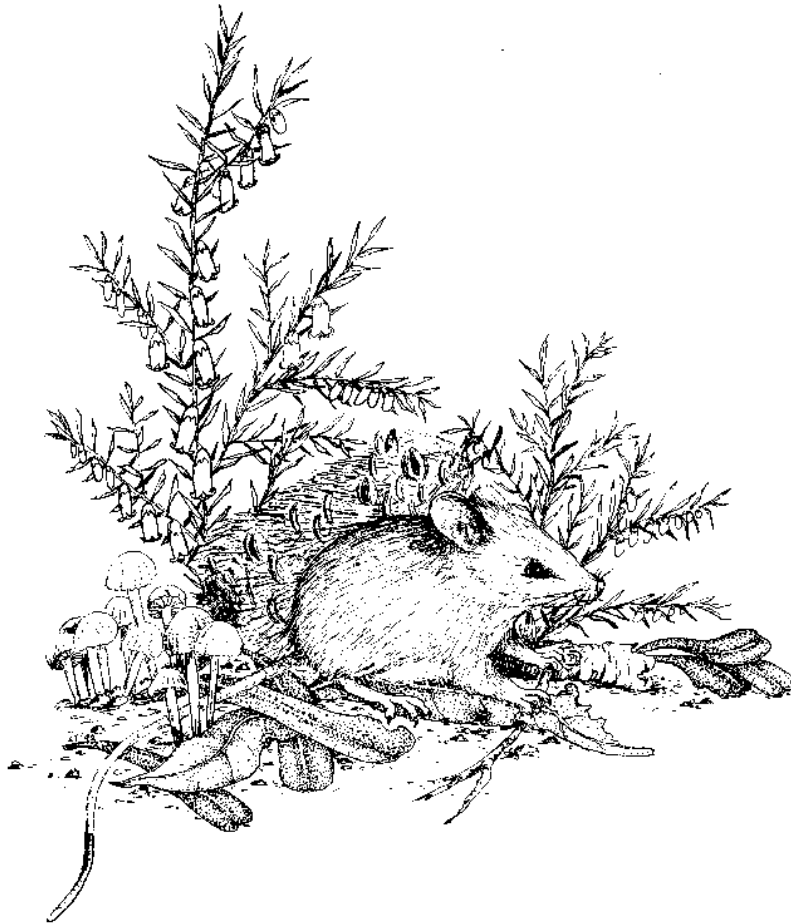


The Lakes National Park and Gippsland Lakes Coastal Park

November 1998



Management Plan



This Management Plan for The Lakes National Park and Gippsland Lakes Coastal Park is approved for implementation. Its purpose is to direct all aspects of management in the Parks until the Plan is reviewed. A Draft Management Plan for the Park was released for public comment in December 1996. One hundred and forty-seven submissions were received and have been considered in developing this Approved Plan.

Copies of the Plan can be obtained from:

Parks Victoria
378 Cotham Road
KEW VIC 3101

Parks Victoria Information Centre
35 Whitehorse Rd
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Cover: New Holland Mouse (*Pseudomys novaehollandiae*) - found in Gippsland Lakes Coastal Park,
endangered in Victoria. Illustration by Lyn Turner.

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FOREWORD

The Lakes National Park and Gippsland Lakes Coastal Park protect both marine and terrestrial environments, and are important for conserving native flora and fauna. Internationally significant wetlands, which include Lake Reeve, provide refuges for migratory waders and are a special feature of the Parks. The Parks also support significant populations of the endangered New Holland Mouse, and contain a number of important archaeological sites.

Managed primarily for nature conservation, these two Parks are a vital component of the Gippsland Lakes tourist area, offering local residents and visitors a range of recreational opportunities in a natural setting.

This Approved Plan establishes the long-term management framework for protecting the great natural and recreational values of the two Parks, and ensures that they will continue to play an important role in nature-based tourism.

I thank the individual people and organisations who made submissions on the Draft Plan, and I look forward to continuing community support in managing these special Parks.

Marie Tehan MP
Minister for Conservation
and Land Management

APPROVED MANAGEMENT PLAN

This Approved Management Plan has been prepared under the provisions of Sections 17 and 18 of the *National Parks Act 1975* (Vic.), and is approved for implementation.

The Plan provides the basis for future management of The Lakes National Park and Gippsland Lakes Coastal Park. It was finalised following consideration of the 147 submissions received on the draft plan.

Rod Gowans
**Acting Director of
National Parks**

Mark Stone
**Chief Executive
Parks Victoria**

SUMMARY

The Lakes National Park (2390 ha) and Gippsland Lakes Coastal Park (17 584 ha) are a unique combination of lakes, wetlands, and marine and terrestrial environments. The diversity of vegetation communities is a reflection of the complex interplay between these environments. Protecting the high conservation values of these Parks, and generally allowing natural processes to take place, will be a key focus of park management.

Gippsland Lakes Coastal Park attracts a large number of visitors each year and offers a wide variety of activities such as camping, hunting, picnicking, and beach and water-based activities. This Park includes a large section of the magnificent Ninety Mile Beach and the internationally significant Lake Reeve. The Lakes National Park caters mainly for day visitors. The rich flora and fauna of this Park are important for both conservation and visitor enjoyment. These two Parks combine to form a major component of the attractions of the Gippsland Lakes tourism region.

The proximity of the Parks to population centres at Loch Sport and Golden Beach and to the waters of the Gippsland Lakes presents an opportunity to promote nature-based tourism to the many visitors to the area. Sensitive and limited development, together with high quality information about the values and features of the Parks, will create tourism opportunities in conjunction with conservation of the environment.

Significant management directions for the Parks are summarised below.

- Protection of a number of significant flora and fauna species, such as the New Holland Mouse and the Metallic Sun-orchid.
- Protection of the internationally significant Lake Reeve.
- Development of a pest plant and animal control program.
- Improving visitor facilities, including camping areas, lookouts, parking and coach access, at several locations.
- Developing new walking tracks from Emu Bight to Dolomite Picnic Area and from Red Bluff to Point Wilson.
- Increasing public awareness, understanding and enjoyment of the Parks.

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1 INTRODUCTION

1.1 Location and planning area

The Lakes National Park and Gippsland Lakes Coastal Park are at the southern end of the Gippsland Lakes, along Ninety Mile Beach and about 300 km east of Melbourne (figure 1).

This Management Plan covers both The Lakes National Park and Gippsland Lakes Coastal Park. The uses and management of the two areas are closely related, and they have similar natural values.

The Lakes National Park covers 2390 ha bounded by Lake Victoria, Lake Reeve and the township of Loch Sport. Gippsland Lakes Coastal Park is a narrow coastal reserve covering 17 584 ha along approximately 90 km of Ninety Mile Beach from Seaspray to Lakes Entrance (figure 1).

1.2 Regional context

The Gippsland Lakes are a group of large coastal lagoons in eastern Victoria, separated from the sea by sand dunes and fringed on the seaward side by Ninety Mile Beach. They are an important focus for tourism in Gippsland.

Other public land in the region includes:

- Holey Plains State Park: containing relatively large areas of Shining Peppermint - Saw Banksia Woodland which has very limited occurrence outside this area;
- Mitchell River National Park: with spectacular rock formations, deep gorges and rainforest in many of the gullies;
- Nooramunga and Corner Inlet Marine and Coastal Parks: major fish breeding grounds, habitat for migratory wading birds and rare and endangered species;
- Lake Tyers Park: containing much forest in largely undisturbed condition, popular with day visitors and campers and protecting the waters of Lake Tyers;
- Nyerimilang Park: with an historic homestead, expansive gardens for picnicking and the East Gippsland Botanic Garden (being established);

- State forest and softwood production areas.

1.3 Significance of the Parks

The Lakes National Park and Gippsland Lakes Coastal Park make 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 natural and cultural values, and many make important contributions to tourism.

The Lakes National Park is assigned the IUCN Category II (National Parks) of the United Nations' 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.

Gippsland Lakes Coastal Park is assigned the IUCN Category VI of the United Nations' List. Category VI areas are predominantly unmodified natural systems managed to ensure long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

The Lakes National Park contains large areas of diverse and relatively undisturbed flora and fauna communities representative of the inner barrier of the Gippsland Lakes system. This, and the spectacular views and easy access to the Lakes, give the Park National significance.

Gippsland Lakes Coastal Park takes in extensive coastal dune systems, woodlands and heathlands, as well as waterbodies such as Lake Reeve and Bunga Arm.

The Lakes National Park, and a large part of the Gippsland Lakes Coastal Park, are listed on the Register of the National Estate in recognition of their significant natural values.

Much of Ninety Mile Beach and the adjacent dune system is used intensively for recreation. Other areas of the Park, such as lake shorelines, are also sought by visitors to the region. Large areas of woodland and heathland, and Lake

Reeve, are of particular conservation significance.

The Parks have a long history as a resource-rich refuge for the Aboriginal community and as a retreat for European settlers. Homestead sites and features associated with construction of the entrance to the lakes reflect pastoral and recreational activity, and the opening up of the lake system and its hinterland to fairly intensive settlement and exploitation.

Significant features of the Parks are summarised below.

Natural values

- Both Parks support valuable remnants of vegetation communities that have been disturbed throughout much of their range, including Coast Banksia Woodland, Heath Tea-tree Heathland and Hairy Spinifex Grassland.
- Lake Reeve is of international significance and is a site of special scientific interest. This long, shallow lagoon is fringed by salt marsh with a number of plant species 'relatively uncommon in Victoria east of Seaspray' (Barson & Calder 1976).
- Six significant flora and over 20 significant fauna species have been recorded within the Parks.
- Lake Reeve provides important breeding habitat for a number of waterfowl species and is one of Victoria's five most important areas for waders.
- Wetlands within the Parks are important nursery areas for many fish species.
- The Parks contain sites of National, State and regional geological and geomorphological significance mainly associated with the evolution of the barrier system that formed the Gippsland Lakes (McRae-Williams et al. 1981).
- The Gippsland Lakes area, which includes the Parks, is recorded as a significant regional landscape by the National Trust of Australia.

Cultural values

- Aboriginal Affairs Victoria has recorded 88 Aboriginal sites within or close to the Parks.
- Historic places in the Parks include the remains of previous occupations, the blowhole sites on the outer barrier adjacent to Bunga Arm, and the site of construction of the artificial entrance to the sea.

Tourism and recreational values

- The Parks are the only large, relatively natural areas of public land on the Gippsland Lakes, and are significant attractions for this important tourist destination.
- Both Parks have a large number of low-cost campsites with basic facilities and a natural setting close to beach and lake shores.
- Fishing is popular throughout the Lakes and in the Parks.
- Species of proclaimed game may be hunted in season in part of Gippsland Lakes Coastal Park.
- Rotamah Island is a focus for environmental education.

1.4 Creation of the Parks

Sperm Whale Head National Park (1451 ha) was reserved under the *Land Act 1958* (Vic.) in 1927 and declared a fauna sanctuary under the *Game Act 1936* (Vic.). It was subsequently reserved under the National Parks Act in 1956 as 'The Lakes National Park'. The Park was enlarged by 668 hectares in 1958. Rotamah and Little Rotamah Islands were added in 1978 to make a total of 2390 hectares.

The Government proclaimed Gippsland Lakes Coastal Park on 26 April 1979 following Land Conservation Council recommendations (LCC 1973). A number of areas of freehold land have since been added and 384 ha was added in 1997.

The Lakes National Park is reserved under Schedule 2, and Gippsland Lakes Coastal Park is reserved under Schedule 3, of the National Parks Act.

1.5 Legislation and guidelines

The Lakes National Park and Gippsland Lakes Coastal Park are reserved and managed under the National Parks Act. The Act requires the Director to preserve and protect the natural condition of the Parks and their natural and other features, and to provide for the use of the Parks by the public for enjoyment, recreation and education, and for research. Sections 17 and 18 provide the legislative basis for management of the Parks.

The Parks are managed in accordance with the recommendations of the Land Conservation Council (LCC 1973), accepted by the Government in May 1977.

The waters of the Gippsland Lakes Coastal Park and The Lakes National Park form part of the 43 000 ha Gippsland Lakes Site of International Significance, listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (known as the Ramsar Convention). The Convention requires contracting parties to designate wetlands of international importance and manage them to protect the ecological characteristics for which sites were nominated.

The Victorian Government is committed to conserving habitats of birds listed in the Japan-Australia Migratory Birds Agreement 1974 (JAMBA) and the China-Australia Migratory Birds Agreement 1987 (CAMBA). Several listed species regularly use Lake Reeve.

The Parks are managed in accordance with Parks Victoria guidelines for the management of parks and with other strategies and plans including:

- Gippsland Lakes Strategy (Government of Victoria 1990);
- Gippsland Lakes Management Plan (DCE 1991);
- Draft Gippsland Lakes Fisheries Management Plan (CNR 1995a);
- Bairnsdale Region Fire Protection Plan (DCE 1990a);
- Central Gippsland Region Fire Protection Plan (DCE 1990b);

- Lakes and Wilderness, and Phillip Island and Gippsland Discovery Regional Tourism Development Plans (TV 1997a, 1997b);
- Victorian Coastal Strategy (Victorian Coastal Council 1997).

1.6 Park management aims

Section 4 and Sections 17 and 18 of the National Parks Act provide the main basis for management of the Parks. The following management aims are derived from these sections and as such broadly govern all aspects of park management.

Resource conservation

- Protect and conserve the natural environment.
- Allow natural environmental processes to continue with a minimum of interference.
- Maintain biodiversity.
- Conserve features of archaeological, historic and cultural significance.

Park protection

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

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 a better understanding and management of the Parks.
- Co-operate with local, State and interstate government 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 The Lakes National Park and Gippsland Lakes Coastal Park finds a unique combination of lakes, wetlands, marine and terrestrial environments, protecting rich flora and fauna communities and sensitive land systems.

Through improved land and water management practices, impacts on the water quality of Lake Reeve have been minimised. The future of the Lake as an important habitat for waders and breeding area for waterfowl is assured.

Knowledge of the distribution and ecology of plant and animal communities has significantly increased through detailed surveys and ecological research and is ensuring the long-term conservation and diversity of species. Careful management of access has reduced erosion of the dune systems and impacts on the bed and shoreline of Lake Reeve.

A pest plant and animal control program has eradicated some pest species and effective liaison with neighbours and monitoring has reduced the impact of others.

Though visitor numbers to the Parks have increased, assessment of visitor needs, careful monitoring of impacts and development of appropriate facilities have ensured that visitors are able to enjoy the Parks. This has been achieved through a range of recreation opportunities which have minimal impact, assisted by high quality interpretation facilities and services.

Effective community liaison has led to more sensitive use of both Parks, and volunteer groups make a major contribution to their management.

2.2 Management directions

Significant management directions for the Parks are outlined below:

Resource conservation

- Significant flora and fauna species, such as the New Holland Mouse and Metallic

Sun-orchid, will be protected as a high priority.

- Wetland values of Lake Reeve will be optimised by assessing factors affecting the water regime and developing appropriate strategies.
- The environmental condition of the key values of the Parks will be monitored.

Park protection

- An ecological burning program will be developed taking into account ecosystem requirements and the protection of assets.
- A pest plant and animal control program including community education will be developed.
- The fragile coastal dunes and wetlands will be protected by managing vehicle, horse and pedestrian access.
- Adverse effects of activities on private land on the landscape values of the Parks will be minimised through liaison with the local municipality.

The Park visit

- Visitor facilities at several key locations will be improved.
- Camping between Paradise Beach and The Honeysuckles will be rationalised but the number of sites will be maintained. Improved facilities will be provided in this area and a camping permit system introduced.
- A walking track from Red Bluff to Point Wilson will be developed, incorporating a route from Dolomite Picnic Area to Emu Bight.
- A beach access plan for Gippsland Lakes Coastal Park will be developed.
- Public awareness of the Coastal Park will be increased through the development of an interpretation strategy, including new information boards at Loch Sport Causeway and Golden Beach.

- There will be liaison with relevant hunting organisations to review public safety and reduce impacts of activities associated with hunting.

Community awareness and involvement

- Co-operation with local government and other public authorities, community groups, lessees and landholders will be encouraged in wetland and fisheries management, conserving native vegetation and park protection.

2.3 Zoning

A management zoning scheme has been developed to:

- provide a geographic framework in which to manage the Parks;
- indicate which management aims 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 those and the protection of park values;
- provide a basis for assessing the suitability of future activities and development proposals.

Three management zones apply to the Parks - Conservation, Conservation and Recreation, and Recreation Development.

In addition, two Special Management Areas (Coastal Protection and Public Utility) and a Land Use Designation (Hunting) are used to summarise requirements additional to those of the underlying primary management zones.

Table 1 specifies management zone and overlay characteristics, and figures 2 and 4 show their location.

TABLE 1 PARK MANAGEMENT ZONES AND OVERLAYS

	CONSERVATION ZONE	CONSERVATION AND RECREATION ZONE	RECREATION DEVELOPMENT ZONE
AREA/LOCATION	5674 ha; 28.7% of Parks. Comprises most of The Lakes NP, a section of Lake Reeve, and Ninety Mile Beach.	14 200 ha; 71.1% of Parks. Comprises most of Gippsland Lakes Coastal Park west of Loch Sport, and Boole Poole Peninsula.	50 ha; <0.01% of Parks. Small areas at Golden Beach, Paradise Beach, Loch Sport Causeway, Lake Reeve Lookout, Emu Bight, Point Wilson, Rotamah Island and Bunga Arm.
VALUES	Areas of high conservation value and relatively undisturbed vegetation.	Large area containing high conservation value with scope for recreation opportunities.	Sites with facility development in a natural setting.
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.	Provide primarily for high use visitor nodes with a concentration of recreation and/or interpretation facilities.

	OVERLAYS		
	SPECIAL MANAGEMENT AREA		LAND USE DESIGNATION
	COASTAL PROTECTION	PUBLIC UTILITY	HUNTING
AREA/LOCATION	Ninety Mile Beach and dunes between Seaspray and Paradise Beach and Bunga Arm as shown in figure 2.	Power transmission line, gas pipeline and trigonometric survey points as shown in figure 4.	Areas shown in figure 4.
VALUES	Narrow strip of easily accessed beach and dunes. Dune areas highly susceptible to destabilisation and erosion. Access is carefully managed to provide for visitor use and protect sensitive dune areas.	Strip of cleared land carrying transmission and pipelines. Trigonometric survey points.	Areas in Gippsland Lakes Coastal Park in which duck, deer and quail hunting are provided for.
GENERAL MANAGEMENT AIM	Highlight areas or sites where special management provisions are needed to provide for a particular non-standard use or activity.	Highlight areas or sites where special management provisions are needed to provide for a particular non-standard use or activity.	Provide for specific legislative requirements.

3 RESOURCE CONSERVATION

3.1 Geological and landform features

The Parks contain sites of National, State and regional geological and geomorphological significance mainly associated with the evolution of the sandy barrier system which formed the coastal lagoons comprising the Gippsland Lakes. These formations include Lake Reeve, Sperm Whale Head, Boole Poole Peninsula, Bunga Arm, the Outer Barrier and Ninety Mile Beach (McRae-Williams et al. 1981).

Sites of geological and geomorphological significance have been disturbed by activities such as excavation, loss of vegetation, erosion, road and track construction, residential development and alteration to natural water regimes.

Aim

- Manage and protect sites of geological and geomorphological significance to allow public access and appreciation.

Management strategies

- *Encourage further research into and studies of the geomorphology of the Gippsland Lakes, particularly the entrance dynamics and management of dune blow-out spits in Bunga Arm.*
- *Monitor and address threats to the geomorphological values of significant sites.*

3.2 Hydrology

At the time of European settlement the Gippsland Lakes were linked to the sea by an intermittent entrance. Sand deposition closed the entrance during low river flow until high river flow raised the level of the Lakes and breached the sand barrier. An artificial entrance was opened in 1889 to improve boat access into and out of the Lakes system. This resulted in reduced fluctuations and a general lowering of the Lakes' levels, thereby changing the flooding regime of the bordering swamps.

The salinity of the Lakes' water also increased, causing extensive dieback of Common Reed beds along the shorelines. Without the protection of the reed beds, shoreline erosion became extensive and widespread.

Lake Reeve, as part of the Gippsland Lakes system, has been declared under the Ramsar Convention to be of international significance.

Merriman Creek to the western end of Lake Reeve can naturally breach the sandbar on Ninety Mile Beach through to the ocean. In order to breach the sandbar, however, the creek has to bank up. This increase in height can result in flooding of the nearby Seaspray township.

To prevent this flooding in Seaspray the Seaspray Flood Mitigation Scheme was installed in 1987. This has altered the natural operation of the sandbar at the mouth of the creek, and has largely prevented the natural inflow of water from the creek to Lake Reeve.

The Scheme has had an impact on the input of water to Lake Reeve from Merriman Creek, although a proportion of Merriman Creek floodwaters can be diverted to Lake Reeve under special circumstances. Lack of water in Lake Reeve appears to be reducing wetland habitat values. However, Seaspray must continue to be protected from floodwaters.

The effect of present water extraction from Merriman Creek on creek flows is unknown.

Aim

- Identify the optimum water regime for Lake Reeve and improve habitat for migratory waders.

Management strategies

- *Encourage and assist education and research institutions and volunteers to assess the health of Lake Reeve using key indicators such as the number of migratory waders.*
- *Encourage development of a water management strategy for the western end of*

Lake Reeve, in conjunction with Southern Rural Water, Shire of Wellington, NRE and the West Gippsland Catchment Management Authority to approximate the system's natural hydrology.

- *Encourage investigation of sediment input and deposition in Lake Reeve, to determine effects on water levels.*

3.3 Flora

Both Parks support valuable remnants of vegetation communities. These include Coast Banksia Woodland, Coastal Saltmarsh, Estuarine Wetland, Coastal Dune Scrub Complex and Damp Sands Herb-rich Woodland. The most widespread vegetation association in the Parks is Heathy Woodland/Sand Heathland.

Six significant plant species occur in the Parks (appendix 1). Knowledge of the distribution and ecology of many plant species is limited, although recent work has provided distribution data on vegetation communities.

It is possible that changes to fire regimes may have resulted in the spread of Coast Tea-tree scrub into former woodland areas in locations such as along Ninety Mile Beach around Golden Beach, and at Pelican Point and Loch Sport. To maintain or re-establish their vitality, some of the vegetation communities in the Parks require a suitable burning regime. The long-term absence of fire on Sperm Whale Head has made the vegetation of the area unusual in Victoria.

Native flora and fauna communities on Rotamah Island have been degraded through clearing, burning and grazing. Grazing by kangaroos may be modifying regeneration on the island (section 3.4). Monitoring indicates a decline in kangaroo numbers and an increase in Black Wallaby numbers in recent years.

Vegetation communities are under threat from introduced fauna and flora, and from uncontrolled recreational use. The saltmarsh communities on Lake Reeve are particularly sensitive, and introduced mammals have an impact on sand dune vegetation, including Coast Wattle, Beach Spinifex and the

introduced sand stabiliser Marram Grass on the Boole Poole Peninsula (section 4.2).

Intertidal zones dominated by Sea Rush and other salt tolerant plant species are subjected to disturbance by visitors travelling by boat. The action of berthing and the subsequent disembarking of passengers contribute to shoreline erosion at popular day visitor sites and adjacent to the Bunga Arm campsites (section 5.2.3).

Aims

- Conserve native plant communities, giving priority to significant communities.
- Improve knowledge of the Parks' native vegetation and its management requirements.
- Actively manage significant species where required.
- Allow natural ecological processes to continue.
- Revegetate degraded areas with local provenances of indigenous species.

Management strategies

- *Map the vegetation communities in the Parks and vegetation age in relation to fire. Include sites of flora significance on a Sites of Significance register.*
- *Protect sensitive dune, salt marsh herbfields and wetland areas by controlling public access (section 2.3).*
- *Manage Flora and Fauna Guarantee listed plants according to approved action statements.*
- *Encourage research into the ecology of significant plant communities and species.*
- *Undertake revegetation and rehabilitation of disturbed areas where appropriate particularly the cleared areas along pipelines (in conjunction with Esso Aust. – section 7.1.4).*
- *Encourage and assist education and research institutions and volunteers to undertake flora surveys.*

- *Encourage research into fire ecology of vegetation communities, particularly Coast Tea-tree scrub (section 4.1).*

3.4 Fauna

The Parks provide a diversity of habitats for many fauna species. More than 190 species of birds have been recorded on Sperm Whale Head. Although there have been few dedicated fauna surveys, 26 species of native mammals, 17 of reptiles and 11 of amphibians have been recorded in the Parks.

Over 20 species found in the Parks are listed as significant (appendix 2). Gippsland Lakes Coastal Park is considered the most important site in Victoria for the endangered New Holland Mouse. As its optimum habitat appears to be heathy woodland actively regenerating after burning, careful long-term management using fire to create a mosaic of different age-classes of vegetation is an important objective (section 4.1).

Rabbits browse native vegetation and compete with native fauna for food. They are creating problems particularly at Point Wilson, Rotamah Island, Trapper Point and Emu Bight. A recent study in the Gippsland Lakes Coastal Park has established that the introduced Red Fox is a serious predator of fauna, especially Long-nosed Bandicoots. Predation of native wildlife by foxes is listed as a potentially threatening process under the *Flora and Fauna Guarantee Act 1988* (Vic).

Lake Reeve attracts the largest concentration of migratory waders in East Gippsland and is one of the five most important areas for waders in Victoria (Norris & Mansergh 1981). The Lakes and surrounding wetlands are an important drought refuge for many species of waterbirds in south-eastern Australia, and are of international significance for waterbird habitat. Both Parks contain important breeding, feeding and roosting sites for many significant species (appendix 2).

Changing environmental conditions can cause difficulties in delineating and protecting sites of significant fauna habitat, such as shorebird roosting areas. Sites may be subject to a range of threats and disturbances such as die-back of

roosting vegetation, predation from introduced predators, human disturbance and population influxes due to conditions elsewhere – for instance, drought in other parts of Australia (see also section 3.2).

Grazing by kangaroos may be affecting regeneration of vegetation in some areas of the Parks. Large numbers of kangaroos feed at Point Wilson, Rotamah Island and Silvershot Landing in close contact with park visitors.

Although Hog Deer are an exotic species, they are considered to be wildlife under the *Wildlife Act 1975* (Vic.). They are found in the Parks and are valued for recreational hunting.

Whale strandings and exhausted seals are known to occur along Ninety Mile Beach.

Aims

- Protect and maintain the diversity of native fauna.
- Provide special protection and undertake specific management for threatened species and communities where appropriate.
- Encourage research and resource surveys of indigenous fauna.
- Allow natural ecological processes to continue.
- Comply with the Ramsar Convention and migratory bird agreements in the management of Lake Reeve and other waterbird habitats.
- Ensure quick response to whale strandings.

Management strategies

- *Manage species listed under the Flora and Fauna Guarantee Act according to approved action statements.*
- *Encourage research into the status, distribution, habitat and local conservation requirements of fauna with emphasis on significant species, in particular:*
 - *breeding and roosting habitats of the Hooded Plover, Little Tern and Fairy Tern (section 7.1);*
 - *nest sites of the White-bellied Sea-Eagle;*

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-
-
-
- *habitats.*
- *Develop and implement monitoring programs for significant species, appropriate.*
- *Regularly monitor migratory waders on Lake Reeve, as an indicator of the health of*
- *on fauna, fire and sites of faunal significance.*
- *Encourage and assist educational fauna surveys.*
- *Encourage investigation of the effect of Hog Deer on native flora and fauna.*
- *Continue to monitor kangaroo numbers and populations, and manage in accordance with Parks Victoria guidelines.*
- *Discourage feeding of kangaroos, in management planning and the Central Gippsland Region Wildlife Welfare Plan, in the event of a whale stranding.*

3.5

The Gippsland Lakes area, which includes the Parks, is recorded as a significant regional

The contrast of land with water is of prime visual importance. The Parks' shorelines are degrade long-distance views.

The development of residential areas adjacent to

along Ninety Mile Beach would have a significant effect on the landscapes of the

Aims

- Protect areas of high scenic quality.
- Minimise the visual effects of management activities and developments within and adjacent to the Parks.

Management strategies

- *Ensure that developments and management activities have minimal impact on*
- *reduce the visual effect of utilities in the Parks (section 7.1.4).*

3.6 Cultural heritage

The Gippsland Lakes are significant for the Tatungalung clan of the Kurnai tribe. There

remains, charcoal and burnt pebbles in the Parks; Aboriginal Affairs Victoria (AAV) has

the Parks. The area has not been comprehensively surveyed for sites of either 1976; LVWSB 1986).

may be threatened by erosion, earthworks and pilfering.

All Aboriginal sites, places and objects are protected under the *Aboriginal Relics Preservation Act 1972 (Vic.)* and *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

The appropriate Aboriginal community

are the Ramahyuck District Aboriginal Corporation, and the Gippsland and East

An application for a native title determination covering among other areas, the Parks.

The first European records of the Gippsland Lakes were by Angus McMillan in 1840, and of the seaward entrance to the Lakes by John Reeve in 1842.

By 1845 pastoral occupation was well established around the Lakes (Billis & Kenyon 1932) and much of the area now covered by the Parks was cleared and grazed from this period.

A permanent entrance through the outer barrier, opposite Jemmeys Point, was opened in 1889 (Lennon 1975).

From this time changes took place around the shores of the Lakes, including increasing numbers of agricultural selections, fishing establishments such as Paynesville, and holiday settlements such as Cunninghame (present day Lakes Entrance). The recreational use of the Lakes was quickly promoted (Bull 1974); opportunities for fishing and shooting were major attractions. Steamboat cruises were also popular for day tours and Ocean Grange became a popular destination.

Historic sites in the Parks include the 'Honeymoon Cottage' on Boole Poole Peninsula, the homestead on Rotamah Island, a homestead site at Point Wilson, the blowhole sites on the outer barrier adjacent to Bunga Arm, the site of construction of the artificial entrance to the sea, and eel farming ponds near McLennan Strait. Remains of more recent activity include survey lines and sealed bores left from petroleum exploration.

The remains of equipment and buildings used in the construction of the permanent entrance include steel rails on timber sleepers, a jetty, remains of a pier, the two buildings at Entrance Bay (section 7.1.3), and a three legged crane. These are part of the New Works Historic Complex listed on the Victorian Heritage Register under provisions of the *Heritage Act 1995* (Vic.). Similar relics are found on the eastern side of the entrance outside the Gippsland Lakes Coastal Park.

A World War II fighter plane crashed into Lake Reeve during a training flight in 1945. The wreck of a ship, the *Trinculo*, which was beached in 1858, is still evident west of Delray Beach.

Aims

- Identify the location and significance of historic and cultural places in the Parks.
- Protect significant historic, cultural, and Aboriginal places.
- Protect all relics in situ.

Management strategies

- *Identify, protect, interpret and manage Aboriginal sites and places in the Parks in accordance with Parks Victoria guidelines and the Ramahyuck District Aboriginal Corporation, the Gippsland and East Gippsland Aboriginal Co-operative, other local Aboriginal communities and Aboriginal Affairs Victoria.*
- *Encourage survey of Aboriginal sites in conjunction with Aboriginal Affairs Victoria and local Aboriginal communities.*
- *Encourage survey of historic and cultural places, and develop a conservation and action strategy for significant places.*
- *Determine the cultural significance of the derelict 'Honeymoon Cottage' and surrounding cypress trees, and develop an appropriate conservation and action strategy.*
- *Review the recommendations of the New Works Conservation Analysis (Graeme Butler & Associates 1993).*
- *Develop and install an interpretive sign near the wreck of the Trinculo.*
- *Retain exotic trees of historic or cultural value at Point Wilson until they die or become dangerous, then replace with indigenous species.*
- *Monitor the condition of historic places and maintain records detailing management activities undertaken.*

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 fire.

The Code of Practice for Fire Management on Public Land (CNR 1995b) provides the framework for integrated management of fire on public land. The Code establishes appropriate reactions to wildfire and describes the use of prescribed burning for fuel reduction and ecological purposes.

The Parks can pose a significant fire danger as a result of highly flammable vegetation, climate, high numbers of visitors and proximity to large population areas. Current fire protection measures are in accordance with the Bairnsdale and Central Gippsland Region's Fire Protection Plans.

There are logistical problems for fire suppression on Bunga Arm and Boole Poole Peninsula, where access is by water only.

Major causes of fires in the Parks are breakaways from Loch Sport tip, suspected deliberate lighting, barbecues/campfires, and escapes from burns on private property.

Prescribed burning may alter the composition and structure of vegetation communities and their associated faunal assemblages. The Metallic Sun-orchid and New Holland Mouse in particular require sensitive fire management of habitat. An ecological burning program can assist in reducing broad-acre fuel build up while taking into consideration the management of vegetation and fire-sensitive species of flora and fauna.

Aims

- Protect life, property and park assets from injury by fire.
- Minimise the adverse effects of fires and fire suppression methods.
- Minimise the incidence of wildfire caused by visitors in the Parks.
- Liaise with relevant organisations for the common purpose of fire management within the Parks and on adjacent land.
- Maintain fire regimes appropriate to the conservation of native flora and fauna, particularly for species of significance.
- Integrate ecological burning with fire protection objectives.

Management strategies

- *Review the Parks' fire protection strategy incorporating the ecological burning program and the requirements of the regional fire protection plans.*
- *Implement the Bairnsdale and Central Gippsland Region Fire Protection Plans in accordance with the Code of Practice for Fire Management on Public Land (CNR 1995b).*
- *Undertake pre-suppression measures, including prescribed burning, in accordance with the Bairnsdale and Central Gippsland Region Fire Protection Plans and the Code of Practice for Fire Management on Public Land.*
- *Prepare and implement an ecological burning program for the Parks to maintain the vigour and diversity of the Parks' flora and fauna. The burning program should consider:*
 - *management of heathland communities;*
 - *management of Coast Tea-tree;*
 - *management of the habitat of significant species such as New Holland Mouse and Metallic Sun-orchid;*
 - *protection of sites of significance, such as nesting sites of the White-bellied Sea Eagle and wetlands;*
 - *the optimal frequency, intensity and timing of burning for each vegetation type in consultation with NRE fire research staff and other experts;*
 - *the proportion of burning required each year to maintain a mosaic of age classes in each vegetation type.*

- *Give preference to using the following suppression methods when practicable, and incorporate into fire protection strategies:*
 - *use of hand tools and aerial suppression;*
 - *use of existing roads and tracks as control lines;*
 - *back-burning.*
- *Monitor the effects of fuel reduction burns and incorporate the results of research about fire into fire management.*
- *Continue to liaise with the Country Fire Authority in relation to fire management issues in and adjacent to the Parks.*
- *Encourage research into the effect of fire, particularly large or significant fires, on vegetation communities and associated fauna in the Parks.*
- *Include information on fire safety and fire prevention in education programs and interpretive displays.*

4.2 Pest plants and animals, and diseases

Most pest plants in the Parks are associated with disturbed areas such as tracks, firebreaks, previously grazed areas, Park boundaries and recreation sites.

Bridal Creeper is becoming a major problem in several areas, and Spear Thistle is present at Rotamah Island and Point Wilson. Other problem species in the Parks include Ragwort, Horehound, Belladonna Lily, African Box-thorn, Apple of Sodom, Common Dipogon, Pampas Grass, Agapanthus and Taupata.

Introduced fauna recorded in the Parks include the dog, feral pig, rabbit, house mouse, fox, feral cat, black rat, feral goat, Common Starling, Blackbird and European Carp.

The presence of pest animals in the Parks poses various management problems:

- pigs disturb vegetation in parts of the Boole Poole Peninsula;
- rabbits occur in dune scrub in the Gippsland Lakes Coastal Park and in parts of The Lakes National Park, particularly at Rotamah Island, Emu Bight and Point Wilson - they hamper revegetation programs and reduce food availability to native herbivores;
- foxes and feral cats are becoming more prevalent and are a major threat to significant ground-breeding and ground-inhabiting fauna such as the Hooded Plover, Little Tern and New Holland Mouse;
- goats in the Seacombe area are having an impact on vegetation.

The mosquitoes *Aedes camptorhynchus* and *A. vigilax* can be vectors for Ross River Virus, and are found within the Parks.

There is a potential threat of introducing and spreading weeds and pathogens, such as Cinnamon Fungus, through the use of machinery and construction of visitor facilities.

Aims

- Monitor, control, and where possible eradicate, introduced plants and animals, and plant diseases.
- Co-operate with adjoining landholders in the control of pest plants and animals.
- Minimise further establishment of introduced plants and plant diseases.

Management strategies

- *Prepare and implement a pest plant control program with the following priorities:*
 - *control of Bridal Creeper, particularly at Entrance Bay, Ocean Grange, Oil Bore, Point Wilson and Rotamah Island;*
 - *control of Spear Thistle on Rotamah Island;*
 - *control of Common Dipogon at Entrance Bay, Bunga Arm, Paradise Beach and Sperm Whale Head;*
 - *control of Pampas Grass at Entrance Bay;*
 - *control of Ragwort in The Lakes National Park;*

- *control of Cape Ivy at Barrier Landing and Entrance Bay;*
- *removal of the stand of mature pine trees east of Paradise Beach, and rehabilitation of the area, including ongoing control of pine seedlings;*
- *containment of Buffalo Grass at Point Wilson.*
- *Encourage development of a ‘problem plant’ brochure to assist community education on weed problems close to the Parks. Encourage visitors to report any weed infestations.*
- *Co-ordinate pest control efforts in the Parks with those on adjacent land (section 6.2).*
- *Prepare and implement a pest animal control program for the Parks with the following priorities:*
 - *eradication of pig populations on the Boole Poole Peninsula;*
 - *control of rabbits, particularly at Emu Bight, Rotamah Island, Trapper Point and Point Wilson;*
 - *control of foxes and cats, particularly where they are threatening significant fauna;*
 - *control of goats in the Seacombe area.*
- *Liaise with the East Gippsland and Wellington Shires regarding control of mosquito populations adjacent to townships, in accordance with Parks Victoria guidelines.*
- *Locate and isolate any Cinnamon Fungus occurrence in the Parks.*
- *Ensure that appropriate control measures are undertaken, according to Parks Victoria guidelines, to ensure that machinery entering the Parks is free of Cinnamon Fungus.*

4.3 Soil conservation

Most of the soils are deep erosion-prone sands of low fertility, highly leached and with low water holding capacity and cohesion. There are some areas of saline soils of various textures, mainly sandy loams.

Illegal off-road use of vehicles is causing soil erosion and damage to vegetation, particularly on the bed and shorelines of Lake Reeve and in the coastal dune systems of the Stockyard Hill, Golden Beach and Seaspray areas.

Off-site influences such as loss of the Common Reed fringe due to lake salinity may increase shoreline erosion of the Parks. These influences are difficult to control.

Coastal erosion is a natural process but can be accelerated in high use areas such as around jetties and popular fishing areas.

The effects of protecting capital works from erosion by dredging the lake bed and creating sandy beaches are unknown.

Aims

- Control, and where practicable prevent, damage to soils, dunes and beaches.
- Minimise damage caused by vehicle use within the Parks, and eliminate off-road vehicle use.
- Control access to areas of erosion-prone soils.
- Assist in co-ordination and implementation of shoreline erosion control in the Gippsland Lakes.
- Allow natural erosion processes to continue.

Management strategies

- *Erect or maintain suitable barriers to prevent off-road use of vehicles where required, and in particular at Eel Farm Track and nearby tracks, and Pines Track, in Gippsland Lakes Coastal Park.*
- *Design, construct and/or maintain access and facilities to minimise damage to vegetation and soils. In particular, for coastal dune areas, provide fencing behind and/or in front of the dunes, and properly constructed pathways, as required.*

- *Manage vehicle use along the margins of Lake Reeve by developing formed tracks and rationalising access.*
- *Develop an erosion control and monitoring program for high use and other affected areas in the Parks (section 3.3).*
- *Monitor beach and dune dynamics.*
- *Use dredge spoil where available for control of lake shoreline erosion and habitat enhancement in accordance with Flora and Fauna Guarantee action statements. As a second priority, use dredge spoil to maintain beaches at the following locations:*
 - *in front of the Point Wilson picnic area (make no alteration to the spit at Point Wilson);*
 - *at Barrier Landing;*
 - *at Entrance Bay (make no alteration to the saltmarsh between Entrance Bay and Barrier Landing).*
- *Encourage investigation of the environmental impact of sand dredging and the use of dredge spoil to maintain beaches.*

4.4 Pollution

Domestic sullage and sewage could pollute the Parks at several locations if disposal systems are inefficient, especially near saltmarshes bordering Lake Reeve.

Oil spills have occurred along Ninety Mile Beach. Oil and chemical spills can have devastating effects on visitors, fauna and the coastal environment.

Aims

- *Minimise the impact of pollution on the natural environment.*
- *Ensure effective and efficient clean-up operations for oil and other spills.*

Management strategies

- *Encourage and liaise with the Shire of Wellington in developing priorities for implementing sewerage schemes in coastal residential developments.*
- *Implement emergency management planning and/or the National and State Plans to Combat Pollution of the Sea by Oil in the event of an oil spill.*
- *Maintain emergency access points to Ninety Mile Beach at Seaspray, Delray Beach, Golden Beach, Loch Sport and Barrier Landing.*
- *Maintain oil spill equipment and the initial spillage treatment facility and training centre at Rotamah Island, and encourage Parks Victoria staff and volunteers to develop skills in the treatment of oiled wildlife.*

5 THE PARK VISIT

5.1 The Park visitor

The Lakes National Park and Gippsland Lakes Coastal Park have been popular visitor destinations for many years. Major activities undertaken by visitors to both Parks include recreational fishing, boating and camping. Many visitors return to previous sites each summer. Hunting of identified proclaimed 'game' during declared 'open seasons' is also a popular activity in sections of the Gippsland Lakes Coastal Park.

In 1995-96, The Lakes National Park received 53 000 visitors, and Gippsland Lakes Coastal Park over 100 000 visitors.

Recent surveys indicate that the Parks are likely to appeal to most market segments because they offer a wide range of opportunities and settings. A more complete and accurate profile of visitors to the region will emerge with the implementation of the Parks Victoria customer satisfaction and monitoring program. Further market and customer research will also assist in developing information aimed at potential visitors to the region.

The Parks are in Tourism Victoria's Lakes and Wilderness, and Phillip Island and Gippsland Discovery product regions. Emerging areas of visitor interest statewide are in nature-based tourism, backpacking (particularly by international visitors) and tourism associated with major events in Melbourne and elsewhere.

A range of accommodation is available in nearby towns such as Lakes Entrance, Sale, Bairnsdale, Loch Sport, Seaspray, Metung and Paynesville.

Boating activity on the Gippsland Lakes is expected to increase as a result of tourism promotion and expanding accommodation opportunities.

Providing for the visitor

In the future, special provisions will be required to meet the needs of the ageing population and the increasing number of families with young children participating in nature-based recreation. The Parks have an important role in

taking up these opportunities and challenges. The Parks are situated in a region that is embracing tourism enthusiastically, so they will be visited by day trippers from the Latrobe Valley and Central Gippsland as well as by longer term visitors staying in a range of accommodation, including holiday homes. These visitors will have a variety of interests and activities that need to be catered for, and will expect to have a quality experience.

Aims

- Provide opportunities and quality services and facilities for people's use and enjoyment of the Parks.
- Develop an understanding of visitor profiles and attitudes.

Management strategies

- *Permit recreational activities in accordance with table 2.*
- *Provide and maintain facilities and services which highlight, but are in keeping with, the area's distinctive character (sections 5.2.1 to 5.2.10, and tables 3 and 4).*
- *Apply current market survey findings on visitor profiles, patterns of behaviour, expectations and preferences to assist in park management.*
- *Encourage all visitors to adopt minimal impact techniques and adhere to codes of conduct appropriate to their activity.*
- *Establish a program to determine appropriate levels of recreational activity consistent with protecting visitor experiences and park values.*
- *Monitor visitor use to ensure adequate provision of facilities, consistent with appropriate types and levels of use.*

TABLE 2 SUMMARY OF RECREATION ACTIVITIES

ACTIVITY	MANAGEMENT ZONES AND OVERLAYS					
	1	2	3	4	5	6
Picnicking	Yes	Yes	Yes	Yes	N/A	Yes
Camping - land-based, designated sites (limited facilities)	No	No	Yes	Yes	N/A	YC
Camping - land-based, dispersed (no facilities)	No	YC	No	No	No	YC
Camping - boat-based, fully self-contained (no facilities)	No	YC	N/A	No	N/A	No
Walking/Hiking	Yes	Yes	Yes	Yes	Yes	Yes
Bicycle riding	YC	YC	YC	YC	No	YC
Motor boating (including launching and mooring)	YC	YC	Yes	YC	N/A	N/A
Water-skiing/Jet-skiing	No	YC	N/A	YC	N/A	N/A
Use of hovercraft	No	YC	N/A	YC	N/A	No
Horse riding	No	YC	No	No	No	YC
Fishing	Yes	Yes	Yes	Yes	N/A	Yes
Hunting	No	YC	No	No	YC	YC
Dogs	No	YC	YC	YC	YC	YC
Bait collection	YC	Yes	YC	Yes	N/A	YC
Firewood collection	No	No	YC	YC	No	YC

1	Conservation Zone	N/A	Not applicable
2	Conservation and Recreation Zone	YC	Yes conditional - refer to figures or appropriate section for more detail
3	Recreation Development Zone		
4	Special Management Area	Yes	Appropriate
	- Coastal Protection	No	Not appropriate
5	Special Management Area - Public Utility		
6	Land Use Designation		
	- Hunting		

5.2 Visitor recreation activities and facilities

5.2.1 Access

The south-western end of the Gippsland Lakes Coastal Park is easily accessible by two-wheel drive vehicles via sealed roads and tracks. The Boole Poole Peninsula area (eastern end of the Park) is only accessible by boat, and access to the Park near Loch Sport is limited by almost continuous freehold land along the outer barrier.

Access by car within The Lakes National Park is provided by both the Lake Victoria Track and Lake Reeve Track. Both roads offer attractive driving experiences in a natural setting and are part of a scenic circuit drive for visitors to the Park.

There is no land access for management purposes to some key areas of the Parks, such as Rotamah Island.

There are freehold blocks within Gippsland Lakes Coastal Park to which the only formed access is through the Park.

Bitumen roads providing access to the Parks, such as Shoreline Drive, Golden Beach Road, Seacombe-Loch Sport Road, Loch Sport Causeway and Paradise Beach Road, are maintained by the Shire of Wellington.

Maintenance of tracks along pipeline easements is shared with Esso Aust. Illegal off-road driving and recreational use of tracks along pipeline easements is causing problems in some locations (sections 4.3 and 7.1.4).

There are also a number of freehold properties adjoining Gippsland Lakes Coastal Park separated from Ninety Mile Beach by the Park. Access to the Beach from these properties will need to be managed.

Pedestrian access to the beach across the dunes is causing some degradation and will need to be carefully managed.

Emergency access is maintained at several locations along Ninety Mile Beach (section 4.4).

Aim

- Provide and maintain vehicle and pedestrian access to and within the Parks for recreation and management.

Management strategies

- *Permit the use of, and manage, roads and tracks in accordance with table 3.*
- *Permit bicycles on all public vehicle roads and tracks.*
- *Investigate options for obtaining land access for management of Rotamah Island, and implement the preferred option.*
- *Prepare and implement a beach access plan for the Gippsland Lakes Coastal Park which addresses the following :*
 - *access and carparks for visitors;*
 - *location, standard, maintenance and construction of walkways.*
- *Prohibit vehicle access to Ninety Mile Beach except for:*
 - *emergency vehicle access;*
 - *other activities subject to permission under the National Parks Act or Park Regulations.*
- *Continue to maintain all tracks on the Boole Poole Peninsula and causeways at Jimmys Creek (dry weather access only) for management and emergency use only (table 3 and figure 3).*
- *Liaise with the Shire of Wellington in response to requests for legal access to freehold property within the Park.*

- *Liaise with VicRoads and relevant municipalities to upgrade and maintain sign-posting to the Parks.*

5.2.2 Day visitors

Picnicking, boating and beach activities are popular in many parts of the Parks, particularly at Barrier Landing in Gippsland Lakes Coastal Park and at Point Wilson in The Lakes National Park. The Parks provide for a range of activities in natural settings on the beach and lake shores, and easy access to most areas of interest. Facilities available throughout the Parks (table 4 and figure 3) include picnic tables, toilets, carparks and boat jetties.

Easy road access to Ninety Mile Beach enables many day visitors and campers to enjoy the long stretch of beach within the Coastal Park between Paradise Beach and Seaspray.

The collection of firewood for picnic fires is causing degradation of areas adjacent to picnic facilities.

Aims

- Provide accessible, attractive and safe picnic facilities at appropriate sites within the Parks.
- Minimise the impact of picnicking on the natural environment.

Management strategies

- *Provide facilities in accordance with table 4 and figure 3.*
- *Install fuel-efficient wood, gas or electric barbecues in high use day visitor areas as funding permits.*
- *Encourage visitors to bring their own wood, and promote the use of portable gas or liquid fuelled stoves (section 5.2.3).*

5.2.3 Camping

Camping is a very popular activity in both Parks (figure 3). Access to camping sites is by both boat and vehicle.

TABLE 3 — MANAGEMENT OF VEHICLE ROADS AND TRACKS

ROAD OR TRACK	CLASS	COMMENTS	CURRENT STATUS	PROPOSED STATUS	FUTURE MANAGEMENT
Pines Track	2	Fishing access.	O	O	Close track beyond second pipeline crossing to public access.
Jimmys Causeway	3	Hunter access.	O	O	Unchanged.
Wilsons Causeway	3	Hunter access.	O	O	Unchanged.
Track Ten Causeway	2	Private property access.	O	O	Managed by Wellington Shire.
Track No. 2	2	Hunter access.	O	O	Unchanged.
Track No. 3	2	Private property & hunter access.	O	O	Managed by Wellington Shire.
Track No. 4	2	Private property & hunter access.	O	O	Pursue transfer of road reserve to include Track Four.
Track No. 5	2		O	O	Unchanged.
Trig Track	2		O	O	Unchanged.
Lakeside Track	2	Hunter and camp area access.	O	O	Unchanged.
Eel Farm Track	2	Fishing and hunter access.	O	O	Maintain seasonal closure on section alongside the Straits.
Spoon Bay Track	2	Hunter and camp area access.	O	O	Unchanged.
Track No. 6	2		O	O	Unchanged.
Crest Track	2		O	O	Unchanged.
Thalia Track	2	Camp area, fishing and hunter access.	O	O	Unchanged.
Monkey Duck Track	2	Hunter access.	O	O	Unchanged.
Waverley Track	2		O	O	Unchanged.
Beacon Swamp Track	2	Access to Red Bluff camp area.	O	O	Unchanged.
Lake Reeve Road	1	Main LNP access road.	O	O	Upgrade to two-way, low speed 2WD gravel road while maintaining the driving experience.
Lake Victoria Track	2	Major LNP sightseeing route.	O	O	Improve drainage and surface stability.

Heavy demand for low cost camping sites with low-key facilities has led to a booking and camping permit system (involving a fee) at Emu Bight and Bunga Arm. Dispersed camping occurs in association with hunting and walking at other locations in the Parks.

Group camping sites at Rotamah Island and Red Bluff are also very popular, but camping in some areas, particularly along McLennan Strait, has resulted in problems such as destruction of vegetation, soil and bank erosion, rubbish dumping and unsanitary sites.

Campfires can also pose a fire risk, and the collection of wood for campfires is severely damaging the natural environment.

The Silver Shot Landing area, on the Boole Poole Peninsula east of Metung, has been used for camping in the past, but is unsuitable because there is private land immediately adjacent, it is a popular day-use area for visitors, and, as the watertable is high, pit toilets are not appropriate and more expensive systems would be required.

Use of radios and power generators causes conflicts between some camping groups, and the use of chainsaws in the Parks creates noise, fire danger and excessive destruction of vegetation.

Aims

- Maintain and enhance camping opportunities.
- Protect sensitive areas of the Parks from adverse impacts of camping.
- Ensure the safety of campers.

Management strategies

- *Provide camping facilities as outlined in table 4 and figure 3.*
- *Promote responsible use of fires in the Parks.*
- *Extend the camping permit system to include designated sites between Paradise Beach and The Honeysuckles (table 4).*

- *Permit solid-fuel fires:*
 - *in The Lakes National Park only in fireplaces provided;*
 - *in Gippsland Lakes Coastal Park in fireplaces provided and at designated campsites in accordance with Park Regulations;*
 - *during the hunting season at dispersed campsites only in the Land Use Designation (Hunting) in accordance with Park Regulations.*
- *Prohibit solid-fuel fires on Ninety Mile Beach.*
- *Allow firewood collection for use in the Parks only within 500 m of the Recreation Development Zone and in the Special Management Area (Coastal Protection), and during hunting season in the Land Use Designation (Hunting).*
- *Encourage visitors to bring their own firewood or commercial suppliers to provide wood from outside the Parks.*
- *Promote the use of portable gas or liquid fuelled stoves in preference to wood fires.*
- *Promote minimal impact camping.*
- *Publicise to campers the provision for hunting in Gippsland Lakes Coastal Park.*
- *Liaise with the Shire of Wellington to discourage unauthorised camping on adjacent freehold land, particularly in the Golden Beach and Glomar Beach area.*
- *Prohibit land-based dispersed camping in the Parks, other than:*
 - *in the Land Use Designation (Hunting) west of Loch Sport, at least 500 m from designated campsites, during and 24 hours prior to the declared hunting season, for a maximum of three nights at any one site;*
 - *by permit by hunters associated with the Hog Deer ballot;*
 - *by permit associated with walkers traversing Ninety Mile Beach.*

TABLE 4 EXISTING AND PROPOSED RECREATION FACILITIES

SITE	CAMPING SITES	TOILET	PICNIC TABLES	FIRE PLACES	WATER SUPPLY	PARK INFO.	WALK TRACK	LOOK -OUT	MANAGEMENT ACTIONS AND COMMENTS
Day use areas									
The Honeysuckles							E		
Flamingo Beach		P	P				E	P	Redesign the carpark and maintain ocean views.
Delray Beach							E		Carpark.
Golden Beach		E	E	E		E	E		Upgrade the toilets and maintain existing electric barbecues.
Spoon Bay	E	E							Camping permitted.
Thalia Point	E	P							Install toilet if required. Continue to permit camping.
Eel Farm		P							Manage access for fishing, install toilet, if demand warrents.
Beach Road							E		Beach access. Shire carpark.
Loch Sport		E				P	E		Improve carpark and information facilities.
Causeway (Stockyard Hill)									Upgrade toilet and access to the beach to a standard suitable for visitors with limited mobility.
Lake Reeve Lookout							E	E	Provide coach parking for several coaches and picnic area and provide interpretive material.
Cherry Tree			E						Beach access.
Trouser Point			E						Beach access.
Point Wilson		E	E	E	E	E	E		Jetty. Maintain beach in conjunction with the delegated management authority.
									Upgrade toilet to a standard suitable for visitors with limited mobility.
Dolomite/The Lakes		E	E	E	E	E	E		Construct gas/electric barbecues.
NP office									
Netting Boundary		E	E	E					
Ocean Grange		E	E	E		P	E		Public jetty and beach access.
Steamer Landing		E	E		E	E	E		Public jetty and beach access.

E = existing, P = proposed

Table 4 (cont.)

SITE	CAMPING SITES	TOILETS	PICNIC TABLES	FIRE PLACES	WATER SUPPLY	PARK INFO.	WALK TRACK	MANAGEMENT ACTIONS AND COMMENTS
First Blowhole		E	E			P	E	Beach access.
Barrier Landing		E	E		E	P	E	Lake and surf beach access. Maintain beach in conjunction with relevant management authorities.
Rotamah Island		E	E	E		E	E	
Entrance Bay		E	E		E			Maintain beach in conjunction with relevant management authorities.
Silver Shot Landing		P	P			P	E	Continue to prohibit camping (sections 5.2.3 and 5.2.7).
Major camping areas								
Paradise Beach	12	E			P		E	Upgrade toilet to a septic system. Introduce camping by permit only.
Red Bluff	Suitable for one to two groups.	E	E	E	E		P	Maintain group campsite.
Emu Bight	20	E	E	E	E	E	E	Group campfires to be provided. Camping by permit only, sites must be booked (Loch Sport office). Provide coach turn-around point and gas/electric barbecues for cooking.
Rotamah Island	Group camping	E	E	E	E		E	Camping by permit only. Priority to be given to education users.
Bunga Arm (7 areas)	77	E		P/E				Camping including group camping by permit only, sites must be booked (Bairnsdale office).
Between Golden Beach and The Honeysuckles (20 areas)	120	P/E		P/E				Rationalise areas and maintain 120 sites. Introduce camping by permit only.

E = existing, P = proposed

- *Permit boat-based camping (fully self-contained 'live aboard') in the whole of Bunga Arm.*
- *Continue to prohibit camping in the cleared areas between The Honeysuckles and the western end of the Gippsland Lakes Coastal Park.*
- *Prohibit the use of generators in both Parks except during hunting season in the Land Use Designation (Hunting).*
- *Prohibit the use of chainsaws in the Parks.*
- *Continue to allow group camping by permit, including school groups at Rotamah Island, Emu Bight and Boole Poole Peninsula.*
- *Continue the co-operative rubbish collection and disposal arrangements with the Shire of Wellington in the Paradise Beach to Seaspray area. Encourage the Shire to maintain some of their large bins or transfer stations for the full year at Golden Beach and to provide facilities for separation of rubbish for recycling. Monitor the success of this program and review placement and number of bins over time. Improve the visual amenity of the bins.*
- *Continue to encourage use of the rubbish disposal system. Enforce this requirement where appropriate.*
- *Liaise with the East Gippsland Shire to develop co-operative rubbish collection arrangements on the Boole Poole Peninsula, and encourage the Shire to locate any new tip outside the Boole Poole Peninsula.*

5.2.4 Rubbish collection and disposal

Large bins are placed by Parks Victoria between Paradise Beach and Seaspray between December and Easter. Over summer the Shire of Wellington provides additional bins at Golden Beach. This system has reduced the litter problem in the Parks considerably.

Domestic rubbish is often deposited in the large bins provided by Parks Victoria for campers.

There are municipal tips at Loch Sport and just south of Rosedale, with a transfer station at Seaspray.

Aims

- Encourage visitors to remove their own rubbish from the Parks.
- Provide for rubbish disposal outside the Parks.

Management strategies

- *Encourage visitors to remove their own rubbish from the Parks using signs, Ranger contact and information in Park Notes.*
- *Provide rubbish bins at locations where servicing will be cost effective.*

5.2.5 Bushwalking

There are a number of walking tracks in The Lakes National Park, including the Lake Reeve Nature Trail and tracks at Point Wilson and Rotamah Island and around Dolomite and Cygnet Swamps. A short walking track to the ocean entrance from Entrance Bay has been constructed on the Boole Poole Peninsula. Walkers access some of the more isolated parts of the Parks along management vehicle tracks. Ninety Mile Beach and Lake shorelines are also attractive walking routes and many of the minor vehicle tracks are often used as walking tracks in the Parks.

Short walking tracks at Point Wilson are currently suitable for wheelchair access.

Based on local observation, there is a significant and increasing demand for walking tracks in the Parks. Interpretation and education about park features can be successfully combined with walking.

Aim

- Provide a range of long- and short-distance walks and minimise impacts on park values.

Management strategies

- *Maintain walking tracks to at least Category C standard.*
- *Establish a walking route, to at least Category C standard, from Red Bluff in the Gippsland Lakes Coastal Park to Point Wilson in The Lakes National Park, using existing tracks where appropriate and including Dolomite picnic area and Emu Bight camping ground (figure 3).*
- *Establish a loop walk at Loch Sport to link with the foreshore walking track, in conjunction with the Loch Sport Tourism and Marketing Group.*
- *Improve signs for walkers in the Silver Shot Landing area on Boole Poole Peninsula.*

5.2.6 Dogs

Dogs have never been permitted in The Lakes National Park.

Some areas of Gippsland Lakes Coastal Park are available for people to walk dogs on leads. Dogs can be a potential source of annoyance and distress for some Park visitors, and if uncontrolled could pose a threat to threatened species such as Little Terns or Hooded Plovers.

Aims

- Allow dogs in specified areas of the Gippsland Lakes Coastal Park where it is consistent with management objectives.
- Allow the use of dogs in association with duck hunting.

Management strategies

- *Permit pet dogs and hunting dogs, under control, in the Gippsland Lakes Coastal Park as shown on figure 5 and as follows:*
 - *dogs must be on a leash at all times and dog handlers will be encouraged to remove dog excrement;*
 - *hunting dogs in association with duck and quail hunting (section 5.2.10);*
 - *dogs confined in boats travelling through the Parks to freehold property*

in accordance with access agreements with Parks Victoria;

- *continue to prohibit dogs from The Lakes National Park.*
- *Promote responsible pet ownership to residents living near the Parks and to visitors.*

5.2.7 Boating and sailing

The Gippsland Lakes are one of the State's most popular locations for water-related recreation, including motor boating, sailing and fishing from boats and canoes. Most of this activity takes place outside the Parks, but some boating occurs within Gippsland Lakes Coastal Park, primarily in Bunga Arm. Boating is the only method of access to some areas of the Coastal Park.

The management of ports and public facilities in the Gippsland Lakes (including public jetties, moorings, navigational aids, dredging, rock walling and beach renourishment) was transferred to NRE from the Port of Melbourne Authority (PMA) on 1 July 1995. Management responsibility for ports in the Gippsland Lakes was subsequently delegated to the Gippsland Ports Committee of Management on 1 July 1996.

Some facilities, such as jetties, are located within or adjacent to the Parks, including those at Point Wilson, Rotamah Island, Steamer Landing and Ocean Grange (figure 3). These jetties are important for recreation and management, giving the only public access to three of these sites.

Boating is popular on sandy shorelines around Point Wilson and Rotamah Island where there are jetties, and around Trouser Point and Emu Bight where shallow draught boats can be safely beached. Canoeing is increasing in popularity in the shallow waters at the entrance to Lake Reeve, around Rotamah Island and the smaller islands east to Ocean Grange.

An increasing number of trailer-sailer yachts and motor cruisers appears to be staying overnight in the Parks. Localised problems with water quality, caused by boats discharging wastes into the water, have been observed.

There are existing facilities outside the Park at Seaspray, and in the Gippsland Lakes Coastal Park at Delray Beach, for launching small craft into the ocean off Ninety Mile Beach. Victoria Police, the responsible agency for search and rescue, considers this activity to be dangerous and extremely hazardous because of the area's remoteness for rescue teams, and the lack of shelter for small craft during bad weather.

At present speed-boating, water-skiing and jet-skis occur in Bunga Arm as far east as the First Blowhole. The use of hovercraft in the Parks is currently low. The area further east is protected waterbird habitat. Because of their greater manoeuvrability and ability to use shallow water, jet-skis and hovercraft have the potential to disturb waterbirds in areas east of the First Blowhole. Lake Reeve is too shallow for motor boats west of Lake Reeve Ranch.

Aim

- Provide for boating and boat access within the Parks consistent with management objectives.

Management strategies

- *Permit speed-boating and water-skiing on Bunga Arm between Steamer Landing and First Blowhole.*
- *Permit use of power skis and hovercraft on Bunga Arm between Steamer Landing and First Blowhole.*
- *Introduce a speed limit of 10 knots on powered craft east of Second Blowhole, on Bunga Arm, to protect waterbird habitat.*
- *Encourage and assist the Environment Protection Authority to monitor the water quality of Bunga Arm and the effect of discharges from boats.*
- *Manage all jetties in the Parks in accordance with Parks Victoria and NRE*

guidelines and the Gippsland Lakes jetty zoning plan (in preparation). Permit no new private jetties.

- *Liaise with Gippsland Ports Committee of Management to:*
 - *encourage the operators of all boats using the Parks to carry toilet facilities and not to discharge wastes into lake waters;*
 - *develop pump-out facilities for septic wastes from boats around the Gippsland Lakes;*
 - *schedule maintenance and other work to an agreed program.*
- *Warn users of the dangers of launching small craft into Bass Strait at Delray Beach.*
- *Prohibit motor boats on Lake Reeve west of Lake Reeve Ranch (figure 4) but allow during the declared hunting season west of Track 10 Causeway (less than 6 h.p. only).*

5.2.8 Horse riding

Some public vehicle roads and tracks in the Gippsland Lakes Coastal Park, and Ninety Mile Beach west of Merriman Creek (outside the Park), are popular for horse riding. Horse riding is not permitted in The Lakes National Park.

Horses are confined to public vehicle tracks and roads to protect the sensitive coastal vegetation and minimise the potential to spread weeds. Overnight camping with horses is not permitted in the Parks.

A commercial operator has a permit to conduct horse riding tours in Gippsland Lakes Coastal Park, including a section of Ninety Mile Beach, east of Long Point.

Aim

- Provide opportunities for horse riding in the Gippsland Lakes Coastal Park, while minimising the effects of this activity and conflicts with other users.

Management strategy

- *Permit horse riding during daylight hours in Gippsland Lakes Coastal Park within the Conservation and Recreation Zone (Zone 2), on public vehicle roads west of Loch Sport.*

5.2.9 Recreational fishing

Fishing is a popular activity throughout the lakes and in the Parks, both from the shore and from boats. Locations particularly popular with anglers include Ninety Mile Beach, the shores of McLennan Strait and most accessible points on the shores of Lake Victoria. In recent years fishing competitions have been organised on Ninety Mile Beach near Golden Beach.

Recreational fishing in some areas results in littering, loss of vegetation and erosion of sensitive banks such as along McLennan Strait.

The Draft Fisheries Management Plan (CNR 1995a) for the whole of the Gippsland Lakes, provides directions for the management of fishing activities, fish stocks and fish habitats in accordance with the policies of the Victorian Government and the requirements of the community as owners of these resources.

In the Parks, fishing will be managed in accordance with the protection of park values.

The Draft Fisheries Management Plan has several objectives relevant to the management of the Parks, including the following:

- ensure that habitats which are important for the survival of Gippsland Lakes fish are protected;
- minimise the impact of fishing practices on waterbirds with high conservation value by ensuring that fish stocks in the Gippsland Lakes are fished at a sustainable level;
- promote maximum and efficient exploitation of carp;
- enhance the recreational experience associated with angling and non-consumptive uses of fish;
- ensure effective consultation with major client groups.

Aim

- Allow for recreational fishing, where it is consistent with the protection of the park values and in accordance with the Fisheries Management Plan.

Management strategy

- *Seek to ensure that the following measures occur through implementation of the Fisheries Management Plan:*
 - *monitor impacts of recreational fishing on the resources of the Parks, particularly juvenile fish, bait species, resident fish species and seagrass beds;*
 - *ensure that issues relating to recreational fishing practices are identified and addressed;*
 - *establish a program to assess the impact of recreational fishing on the Parks as a biological system and protect values as necessary.*

5.2.10 Hunting

Hunting is not permitted in The Lakes National Park.

Hunting in Gippsland Lakes Coastal Park is permitted in designated areas where species of proclaimed game (appropriate duck species, Hog Deer and Stubble Quail) may currently be hunted in season; that is, in that part of the Park west of Beacon Swamp Track, Track 10 Causeway and west of a line from the south end of the causeway to Long Point on Ninety Mile Beach and parts of Boole Poole Peninsula (figure 4).

There are safety concerns associated with hunting, particularly in relation to proximity of residents and other visitors. Hunting is inappropriate in the coastal strip west of Long Point because of the large number of people using this area for other activities, and the lack of suitable hunting habitat.

Lake Reeve is the major area for duck hunting in the Coastal Park, with a concentration of use in the reed-fringed waters between Carrs Creek and Jimmys Creek. Access is gained via the grid of streets in Ninety Mile Beach subdivision, several minor tracks north of Lake Reeve and the Wilson Track Causeway. Duck

hunting is also popular around McLennan Strait.

Some activities and facilities associated with duck hunting are degrading park values. These include camping in sensitive areas, cutting vegetation for hides, long-term presence of derelict hides and inappropriate access tracks.

A balloted hunt of Hog Deer on Boole Poole Peninsula in Gippsland Lakes Coastal Park takes place during the hunting season.

Management of either Hog Deer habitat or of populations for sustainable hunting is not consistent with management objectives.

Hunting for rabbits is currently permitted in an area east of Paradise Beach. This has become inappropriate as a result of the lack of open country to sight rabbits, the effect of the Calicivirus on rabbit numbers, the proximity of the area to private residences and increasing use of this area by other visitors. The area is largely used for unauthorised target practice.

Aims

- Provide opportunities for hunting within the Gippsland Lakes Coastal Park while managing associated risks.
- Reduce impacts of activities associated with hunting.

Management strategies

- *Liaise with relevant hunting organisations to review public safety and reduce impacts of activities associated with hunting. Promote responsible and safe hunting practices.*
- *Seek to amend the Park Regulations to remove the coastal strip south of Pines Track and Shoreline Drive west of Long Point (figure 4) from the designated hunting area.*
- *Seek to amend the Park Regulations to remove the area south of Lake Reeve, including the Lake bed, (figure 4) for Hog Deer hunting, to alleviate any safety concerns associated with hunting close to residential areas using high powered rifles.*

- *Continue to allow a balloted hunt for Hog Deer on the Boole Poole Peninsula, subject to the results of continued assessment of impacts on native flora and fauna and conflicts with other users.*
- *Do not issue rabbit hunting permits/ authorisations (and revoke existing ones) and seek to amend the Park Regulations to prohibit rabbit hunting in Crown Allotment 26B, Parish of Booran as soon as practicable.*
- *Continue to allow duck and quail hunting within the Land Use Designation (Hunting) in Gippsland Lakes Coastal Park (figure 4) in accordance with the Park Regulations 1992. Specifically:*
 - *permit dogs for retrieving game (on a leash and restrained except when retrieving game) in the Land Use Designation (Hunting) 24 hours before and during the declared duck hunting season;*
 - *allow the cutting of vegetation in the Land Use Designation (Hunting) for establishing a duck hide by permit only (where this activity meets with specific park management objectives);*
 - *continue to prohibit the introduction of vegetation to the Park for the construction of hides as per the Park Regulations 1992;*
 - *encourage hunters to use portable hides.*
- *Assess the impacts of duck and quail hunting on populations of migratory waders and other fauna, and on other park values, and seek to restrict the hunting season and areas as required.*
- *Seek to amend the Park Regulations 1992 to permit duck, quail and hog deer hunting in areas added to the Coastal Park north of Lake Reeve in 1997 (section 7.2.1).*

5.3 Visitor information, interpretation and education

Visitor information, interpretation and education assist visitor orientation and foster

understanding, appreciation and protection of park features and values.

Many visitors are not aware that they are in, or entering, Gippsland Lakes Coastal Park, or that it has high conservation values. There are many entry points to the Park.

The Lakes National Park has only one vehicle access point. An office with information about the Park is located at Loch Sport inside the Park boundary.

Current information and interpretation services include walking tracks, advice and support to school education programs, general brochures, information boards and a self-guided nature trail at Lake Reeve Lookout.

Visitor information in some areas is poor, particularly in relation to conservation significance and Park boundaries.

Groups from local schools and from other areas, particularly Melbourne, visit the Parks. Intensive seasonal use is made by schools of the group camping facilities on Rotamah Island and at Red Bluff. The Parks are also visited frequently by students from Camp Coinda on the Banksia Peninsula.

Rotamah Island is a focus for environmental education in the Parks. The homestead, cottage and machinery sheds comprise the Rotamah Island Bird Observatory which is leased to Birds Australia (formerly RAOU). The observatory conducts environmental education courses, for all sectors of the community, undertakes field studies, and is used as an oiled wildlife treatment training centre by NRE and Parks Victoria.

Aims

- Enhance visitors' understanding, enjoyment and appreciation of the values and opportunities of the Parks.
- Provide educational opportunities for schools, tertiary institutions and visitors.

Management strategies

- *Prepare and implement a visitor information, interpretation and public education strategy which identifies:*
 - *visitors and their needs;*
 - *themes for interpreting natural and cultural features;*
 - *locations and media for disseminating information;*
 - *the role of Rotamah Island Bird Observatory, and Parks Victoria assistance in its operation;*
 - *improvements to the information/interpretation facility at Loch Sport and the need for information facilities at other locations.*
- *Provide adequate visitor orientation information and safety messages at key visitor nodes particularly for boat users (section 5.2.7).*
- *Develop and implement a Signs Plan for the Parks.*
- *Establish and implement monitoring and maintenance schedules for all interpretive facilities.*
- *Provide appropriate interpretation at important sites requiring special protection (e.g. sand dunes).*
- *Encourage provision of interpretation activities during peak holiday periods.*
- *Regularly evaluate information and interpretive services related to the Park.*

5.4 Commercial tourism operations

The Parks are part of the Gippsland Lakes area, which has long been a popular holiday and tourist centre and a focus for recreational boating and fishing. Tourism is important to the regional economy, and is increasing because of increased promotion and accommodation.

The Gippsland Lakes Tourism Development Program (VTC 1987) proposed development of the Gippsland Lakes as a single comprehensive tourist destination and emphasised that the Parks have ‘tremendous appeal to particular segments of the target markets’.

The tourism plans for the region recommend improved access to and promotion of key attributes. There is a demand from tourist operators to provide access within The Lakes National Park for large buses.

Several commercial tour operators currently run tours in Gippsland Lakes Coastal Park, and several other commercial tour operators make use of The Lakes National Park.

Aims

- Promote use of the Parks that is compatible with management objectives.
- Provide opportunities for commercial tourism and the touring public while minimising environmental impacts and effects on other visitors.

Management strategies

- *Manage organised recreation events and commercial tour operations, in accordance with Parks Victoria guidelines.*
- *Provide a coach parking area at Lake Reeve Lookout and develop a coach turnaround at Emu Bight (table 4).*
- *Encourage Local Government, local authorities and businesses to co-operate in improving information services for the whole of the Gippsland Lakes region, through regional information centres.*
- *Participate in programs with other agencies and local tourism bodies to promote the Parks and improve visitor information. In particular, promote visitor services and accommodation at Rotamah Island Bird Observatory and Ocean Grange.*
- *Encourage commercial tour operations to provide high quality, sustainable adventure and nature-based experiences and provide*

information on park values and management.

- *Monitor sites and routes used to determine the impacts of current tour operations on park values, and assess the capacity of the Parks to support further commercial tour operators. Promote and permit future use accordingly.*

5.5 Public safety

The safety of visitors to the Parks is a consideration in all aspects of management. The Parks contain a number of natural hazards, particularly during summer when wildfire may be a threat to visitors. However, risks to the public will be minimised by continuing an ongoing risk management to remove identified hazards in the Parks.

There are inherent dangers and risks to the Parks’ visitors associated with hunting (section 5.2.10) and water-based recreation activities, particularly in remote locations (section 5.2.7).

Aims

- Promote safe visitor use of the Parks.
- Ensure that staff are able to assist in emergency situations and co-operate with emergency service organisations.

Management strategies

- *Formalise, and regularly review, search and rescue procedures in consultation with all interested parties; maintain an Emergency Response Plan for the Parks.*
- *Maintain emergency access points to Ninety Mile Beach at Seaspray, Delray Beach, Golden Beach, Loch Sport and Barrier Landing.*
- *Encourage visitors to seek information on any activities they intend to undertake in the Parks.*
- *Contribute to emergency management planning for search and rescue operations within the Parks.*

- *In conjunction with the Shire of Wellington, ensure the adequate provision of fire refuges.*
- *Manage the Parks in accordance with Parks Victoria risk mitigation and emergency management guidelines.*

6 COMMUNITY AWARENESS AND INVOLVEMENT

6.1 Friends and volunteers

There is strong local interest in the management of the Parks. Parks Victoria staff are working with the local community towards the formation of a volunteer group. There is also support for the formation of Coast Action groups.

Volunteers can make valuable contributions to park management and their involvement will be encouraged.

Aim

- Assist volunteer groups to undertake appropriate tasks in the Parks.

Management strategies

- *Encourage the formation of, and support, a Friends group.*
- *Develop and evaluate a long-term volunteer strategy which draws on and develops the skills and interests of volunteer groups in park management activities.*
- *Encourage implementation of the Coast Action Program.*

6.2 Community awareness and Park neighbours

Many of the residents of the area are attracted by the natural bush environment and proximity to the coast, and many surrounding properties retain areas of natural bushland.

As the major conservation manager in the area, Parks Victoria will endeavour to encourage sound management actions by Park neighbours and promote community awareness of the organisation's practices and the values of the Parks.

Some sections of the community are interested in assisting with park management.

Aims

- Increase community 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 Parks.

Management strategies

- *Liaise with local community groups and land owners, and encourage their involvement in appropriate aspects of planning and managing the Parks.*
- *Apply, and encourage the application of, the Good Neighbour Policy to management issues on or near the boundary of the Parks.*

7 OTHER ISSUES

7.1 Authorised uses

7.1.1 Commercial fishing

Commercial fishing takes place in Gippsland Lakes Coastal Park in Bunga Arm and in some sections of the northern shoreline of the Boole Poole Peninsula. Bunga Arm is important for commercial fishing as it allows for fishing during periods of rough weather. Perch Creek is a nursery water for several estuarine fish species and is classified as a high value fishery.

There is potential for conflict between commercial fishing and recreation, particularly in Bunga Arm. Generally, commercial fishers have maintained an informal prohibition on netting during the summer school holidays.

There are concerns that commercial bait collection may detrimentally affect fish-eating species of native fauna such as the endangered Little Tern. In particular, the reproductive success of the Little Tern is greatly influenced by the availability of suitably sized prey throughout the breeding season.

Seine netting is also of concern because of potential detrimental effects on the bottom of the Lakes and conflict with recreational activities.

The Draft Fisheries Management Plan for the whole of the Gippsland Lakes (CNR 1995a), includes those areas managed within the Parks. This Fisheries Plan will guide the management of fisheries in accordance with management objectives (section 5.2.9).

Aim

- Ensure commercial fishing activities are consistent with the protection of park values and in accordance with the Fisheries Management Plan.

Management strategies

- *Manage commercial fishing in Gippsland Lakes Coastal Park in accordance with the protection of park values and the Fisheries Management Plan.*

- *Seek to ensure that the following measures occur through implementation of the Fisheries Management Plan:*
 - *monitor the impacts of commercial fishing on the resources of the Parks, particularly on juvenile fish, bait species, resident fish species and seagrass beds;*
 - *ongoing liaison on issues relating to commercial fishing practices.*
- *Encourage the development of a Code of Practice to formalise prohibition of commercial fishing during school summer holidays in consultation with commercial fishers. Extend the prohibition to Easter school holiday period to minimise conflicts with other users.*
- *Liaise with Fisheries Victoria to:*
 - *prohibit commercial bait collection between the channel islands east of Rotamah Island and Steamer Landing to protect the Perch Creek nursery water;*
 - *assess impacts of seine netting on the floor of Bunga Arm and develop appropriate guidelines to minimise any adverse effects;*
 - *assess the impacts of fishing on the ability of the Little Tern to maintain adequate breeding rates.*

7.1.2 Apiculture

Ten licences have been issued for apiary sites in Gippsland Lakes Coastal Park.

The Parks are a relatively minor source of honey for apiarists, although some of the vegetation in the area can be important.

Bees may have undesirable impacts on native flora and fauna, and can adversely affect visitors and recreation values.

Aim

- Allow apiculture in the Gippsland Lakes Coastal Park, while minimising environmental impact and conflicts with other users.

Management strategy

- *Permit use of up to ten apiary sites within Zone 2 of Gippsland Lakes Coastal Park, and manage in accordance with Parks Victoria guidelines.*

7.1.3 Occupations

There are two life tenancies at Entrance Bay in Gippsland Lakes Coastal Park. These residences date from the period of the construction of the artificial entrance to the Lakes and are part of the New Works Historic Area (section 3.6).

Birds Australia (formerly RAOU) has a 20 year lease for a bird observatory on Rotamah Island in The Lakes National Park. The lease applies to most of the homestead, the cottage, workshop and generator shed on the island. The lease expires on 1 January 2000.

There are several unlicensed private jetties in the Gippsland Lakes Coastal Park at Ocean Grange, Boole Poole Peninsula and west of Rotamah Island. These jetties have been constructed to various standards, raising issues of safety and visual amenity.

The Department of Natural Resources and Environment is developing a jetty zoning plan for the Gippsland Lakes.

Aims

- Ensure appropriate use and licensing of occupations.
- Minimise the impact of occupations on the Parks.

Management strategies

- *Ensure that there are no new occupations issued for the two residences at Entrance Bay after the expiry of the existing tenancies.*
- *Liaise with the Rotamah Island Bird Observatory Committee of Management.*
- *Review the Birds Australia lease prior to January 2000.*

- *Provide input into and implement the Gippsland Lakes jetty zoning plan when completed. Issue jetty licences under the National Parks Act for all existing private jetties in the Parks in accordance with relevant guidelines. Ensure that jetties not meeting the approved standard are upgraded or demolished within two years of the approval of the jetty zoning plan.*

7.1.4 Public utilities

The LaTrobe Valley Ocean Outfall, completed in 1992, carries treated wastewater from Dutson Downs Sewerage Treatment Farm to Bass Strait. There has been some public concern about possible environmental effects of the outfall on Ninety Mile Beach, and a monitoring program is in place.

A 22 KV overhead powerline to Loch Sport follows the road alignment and is mainly located in the road reserve through Gippsland Lakes Coastal Park. The powerline detracts from the natural landscape character of the Coastal Park, requires clearing of vegetation and could pose a fire danger to the Park and surrounding areas.

There has been considerable exploration for oil and gas in and around the Parks, and pipelines servicing the Bass Strait oil/gas fields cross the Gippsland Lakes Coastal Park (figure 4).

There are several trigonometric survey stations in the Parks for which there are no consents under the National Parks Act.

Aims

- Minimise the effects of existing and future utilities on the Parks.
- Ensure appropriate use and licensing of existing and proposed new public utilities.

Management strategies

- *Issue Section 27 consents with appropriate conditions for all utilities and activities by public authorities, in accordance with Parks Victoria guidelines.*
- *Formalise the agreement with Esso Aust. limiting the use of pipeline easement to*

only management purposes and regarding rehabilitation of the easement and maintenance of the access tracks.

- *Assess proposals by public authorities for new works or activities in the Parks in accordance with Parks Victoria guidelines.*
- *Encourage the off-shore and shore-based monitoring program for discharges from the LaTrobe Valley Ocean Outfall.*

7.1.5 Other uses

There are no significant sources of road making gravel in either Park and material is obtained from outside the Parks.

Defence force and emergency service training exercises are occasionally undertaken in Gippsland Lakes Coastal Park.

Aim

- Protect park values from inappropriate activity.

Management strategy

- *Continue to permit and manage Defence Forces and emergency services training in Gippsland Lakes Coastal Park (if no alternative public land is suitable) in accordance with Parks Victoria guidelines. Monitor the impact of training exercises.*

7.2 Boundaries and adjacent uses

7.2.1 Boundaries

Between 1955 and 1969 the freehold land on the outer barrier between Seaspray and Paradise Beach was subdivided into 10 200 residential allotments. Much of this subdivision was either low-lying flood-prone land or on unstable sandy soils. The subdivision has created a number of management problems in Gippsland Lakes Coastal Park.

A buy-back scheme was established in the early 1980s to allow the Government to purchase lots located on the primary dune system.

The LCC recommended that Crown land north of Lake Reeve, vested in Gippsland Water, be

incorporated into Gippsland Lakes Coastal Park (figure 2).

The unclear boundary of the Gippsland Lakes Coastal Parks in many places creates uncertainty among hunters and landowners regarding trespass, and concerns about safety.

Aims

- Manage the boundaries to protect park values.
- Rationalise the boundaries where possible and appropriate.

Management strategies

- *In conjunction with Gippsland Water, review land ownership and control at Dutson Downs. In particular, continue negotiations to incorporate the Crown land vested in Gippsland Water into Gippsland Lakes Coastal Park, as recommended by the LCC (figure 2).*
- *Seek to incorporate into Gippsland Lakes Coastal Park all road reserves located within but excluded from the Park, except for roads providing access to freehold property.*
- *Liaise with the Shire of Wellington on the continued management of the subdivision between Paradise Beach and Seaspray.*
- *Ensure that the Parks' boundaries are clearly marked, particularly in hunting areas, and liaise with adjoining landholders to ensure protection of the natural values of the Parks.*

7.2.2 Adjacent uses

Land adjacent to the Parks is used in a number of ways, including grazing and residential development. These uses may affect park values. Of particular concern is illegal grazing on Lake Reeve in the vicinity of Golden Beach.

Residential development and vegetation clearing on subdivisions will greatly increase use of land adjoining the Parks, particularly along the ocean beach, and could significantly change the natural character of the area.

The various local government planning schemes which currently affect the Parks will eventually be revoked and replaced with a single scheme under the Victoria Planning Provisions. It is anticipated that both Parks will be zoned Public Conservation and Resources Zone under this new planning scheme.

Aim

- Minimise the impacts of adjacent developments and land management on the park values.

Management strategies

- *Continue to liaise with Park neighbours to jointly control inappropriate activities in the Parks such as illegal grazing, rubbish dumping and fires and to reduce usual impacts of activities on adjacent land.*
- *Liaise with the Shire of Wellington on planning matters that may affect the Park and to minimise impacts from developments on adjacent land.*
- *Liaise with Catchment Management Authorities on catchment management issues.*
- *Liaise with the Gippsland Coastal Board on planning issues that may affect the Parks.*

8 IMPLEMENTATION

A three-year rolling implementation program will be prepared for the Parks to ensure efficient implementation of the Plan and to incorporate the Plan's management strategies into the broader budget process. Priority management directions are identified in table 5 as an initial step in this process.

TABLE 5 PRIORITY MANAGEMENT STRATEGIES

MANAGEMENT STRATEGY	SECTION IN PLAN
Resource conservation	
Implement Flora and Fauna Guarantee action statements	3.3, 3.4
Encourage development of water management strategy for Lake Reeve	3.2
Park protection	
Prepare and implement an ecological burning program for the Parks	4.1
Prepare and implement pest control programs	4.2
Implement erosion control measures	4.3
The Park visit	
Prepare and implement beach access plan	5.2.1
Upgrade Lake Reeve Track to 2WD standard	5.2.1
Improve visitor facilities	5.2.2, 5.2.3
Rationalise camping and define designated areas	5.2.3
Develop a walking route from Red Bluff to Point Wilson incorporating a track from Dolomite picnic area to Emu Bight	5.2.5
Liaise with hunting associations to review public safety and reduce impacts of activities associated with hunting	5.2.10
Prepare and implement a visitor information, interpretation and public education strategy	5.3
Monitoring and research	
Encourage research into the ecology of significant flora and fauna	3.3, 3.4
Encourage archaeological and historical survey of Parks	3.6

REFERENCES

- Barson, M.M. & Calder, D.M. 1976, Sites of Special Scientific Interest in the Victorian Coastal Region, A Report on the Botanical Aspects, prepared for the Town and Country Planning Board, unpub.
- Beaglehole, A.C. 1984, *The Distribution and Conservation of Vascular Plants in the South Gippsland Area, Victoria*, Western Victoria Field Naturalists Clubs Association, Portland.
- Beaglehole, A.C. 1985, *The Distribution and Conservation of Vascular Plants in the Gippsland Lakes Hinterland Area, Victoria*. Western Victorian Field Naturalists Clubs Association, Portland.
- Billis, R.V. & Kenyon, A.S. 1932, *Pastoral Pioneers of Port Phillip District*, Stockland Press, Melbourne.
- Bull, J.C. 1974, *Sailing Ships and Paddle Wheels and Other Gippsland Shipping*, J.C. Bull, Metung.
- CNR 1995a, *Draft Gippsland Lakes Fisheries Management Plan*, Department of Conservation and Natural Resources, Victoria.
- CNR 1995b, *Code of Practice for Fire Management on Public Land*, Department of Conservation and Natural Resources, Victoria
- Coutts, P.J.F, Witter, V.C., Cochrane, R.M & Patrick, J. 1976, Sites of Special Scientific Interest in the Victorian Coastal Region, A Report on the Archaeological Aspects, Prepared for the Town and Country Planning Board, unpub.
- DCE 1990a, *Bairnsdale Region Fire Protection Plan*, Department of Conservation and Environment, Bairnsdale, Victoria.
- DCE 1990b, *Central Gippsland Region Fire Protection Plan*, Department of Conservation and Environment, Traralgon, Victoria.
- DCE 1991, *Gippsland Lakes Management Plan*, Department of Conservation and Environment, Bairnsdale, Victoria.
- Government of Victoria 1990, *Gippsland Lakes Strategy*, Government of Victoria, Melbourne.
- Graeme Butler & Associates 1993, *New Works Conservation Analysis*, unpub.
- Ladd, P. G., Ladiges, P. Y. & Calder, D. M. 1976, *Identification of the Landbased Vegetation surrounding the Gippsland Lakes and Lakes Tyers*. Ministry for Conservation, Victoria.
- LCC 1973, *Final Recommendations - South Gippsland Study Area District 1*, Land Conservation Council, Melbourne.
- LVWSB 1986, *Latrobe Valley Ocean Outfall Dutson Downs to Bass Strait, Environmental Effects Statement*, Latrobe Valley Water and Sewerage Board, Traralgon.
- Lennon, J. L. 1975, Our Changing Coastline, *Victorian Historical Journal*, **46**:484-487.
- McRae-Williams, M. S., Rosengren, N. J. & Kraemers, S. M. 1981, *Sites of Geological and Geomorphological Significance in East Gippsland, Victoria*, Ministry for Conservation, Victoria.
- Norris, K. C. & Mansergh, I. M. 1981, *Sites of Zoological Significance in East Gippsland*, Ministry for Conservation, Victoria.
- NPS 1995, *National Parks and Conservation Reserves, Guidelines and Procedures Manual*, National Parks Service Department of Conservation and Natural Resources, Victoria.
- NRE 1998, *Threatened Vertebrate Fauna in Victoria - 1998*, Department of Conservation and Natural Resources, Victoria.
- NRE database 1998a, *Atlas of Victorian Wildlife*, Department of Natural Resources and Environment, Victoria.

NRE database 1998b, Flora Information System, Department of Natural Resources and Environment, Victoria.

TV 1997a, Lakes and Wilderness Regional Tourism Plan, Tourism Victoria, Melbourne.

TV 1997b, Phillip Island and Gippsland Discovery Regional Tourism Development Plan, Tourism Victoria, Melbourne.

Victorian Coastal Council 1997, *Victorian Coastal Strategy*, Victorian Coastal Council, Melbourne.

APPENDIX 1 SIGNIFICANT FLORA

SCIENTIFIC NAME	COMMON NAME	STATUS ¹	SOURCE
<i>Astrotricha parvifolia</i>	Small-leaf Star-hair	R, r	Ladd, Ladiges & Calder (1976)
<i>Prasophyllum frenchii</i>	Maroon Leek-orchid	V, e	Beaglehole (1984)
<i>Rulingia prostrata</i>	Dwarf Kerrawang	E, v, L	Beaglehole (1984)
<i>Thelymitra epipactoides</i>	Metallic Sun-orchid	E, e, L	Beaglehole (1984)
<i>Thryptomene micrantha</i>	Ribbed Thryptomene	r	Flora Information System (NRE database 1998b)
<i>Zieria veronicea</i>	Pink Zieria	r	Beaglehole (1984, 1985) Flora Information System (NRE database 1998b)

¹ Status (NRE database 1998b):

E - endangered in Australia

e - endangered in Victoria

R - rare in Australia

r - rare in Victoria

V - vulnerable in Australia

v - vulnerable in Victoria

L- listed under the Flora and Fauna Guarantee Act as a threatened species.

APPENDIX 2 SIGNIFICANT FAUNA

SCIENTIFIC NAME	COMMON NAME	STATUS ¹
Mammals		
<i>Miniopterus schreibersii</i>	Common Bent-wing Bat	v, L
<i>Myotis macropus</i>	Large-footed Myotis	nt
<i>Pseudomys novaehollandiae</i>	New Holland Mouse	Ce, L
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	v
Birds		
<i>Accipiter novaehollandiae</i>	Grey Goshawk	nt
<i>Ardea alba</i>	Great Egret	e, L
<i>Ardea intermedia</i>	Intermediate Egret	Ce, L
<i>Chlidonias hybridus</i>	Whiskered Tern	nt
<i>Egretta garzetta</i>	Little Egret	Ce, L
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	e, L
<i>Larus pacificus</i>	Pacific Gull	nt
<i>Lathamus discolor</i>	Swift Parrot	V, e, L
<i>Morus serrator</i>	Australasian Gannet	v
<i>Neophema chrysogaster</i>	Orange-bellied Parrot	E, Ce, L
<i>Numenius madagascariensis</i>	Eastern Curlew	nt
<i>Nycticorax caledonicus</i>	Nankeen Night Heron	v
<i>Pelecanoides urinatrix</i>	Common Diving-Petrel	nt
<i>Pezoporus wallicus</i>	Ground Parrot	v, L
<i>Phalacrocorax fuscescens</i>	Black-faced Cormorant	v
<i>Phalacrocorax varius</i>	Pied Cormorant	nt
<i>Platalea regia</i>	Royal Spoonbill	v
<i>Rallus pectoralis</i>	Lewin's Rail	e, N
<i>Sterna albifrons</i>	Little Tern	E, v, L
<i>Sterna bergii</i>	Crested Tern	nt
<i>Sterna caspia</i>	Caspian Tern	v
<i>Sterna nereis</i>	Fairy Tern	v, L
<i>Sterna nilotica</i>	Gull-billed Tern	e, L
<i>Thinornis rubricollis</i>	Hooded Plover	V, e, L
Reptile		
<i>Egernia coventryi</i>	Swamp Skink	v

Source (NRE database 1998a)

¹ Status (NRE 1998):

Ce = critically endangered in Victoria

E = endangered in Australia, under the *Endangered Species Protection Act 1992* (Cwlth)

e = endangered in Victoria

nt = lower risk - near threatened in Victoria

V = vulnerable in Australia, under the *Endangered Species Protection Act*

v = vulnerable in Victoria

L – listed under the *Flora and Fauna Guarantee Act*

N – nominated for listing under the *Flora and Fauna Guarantee Act*