

Lower Glenelg River Conservation Park Management Plan

South East

South Australia



Government
of South Australia

Lower Glenelg River Conservation Park Management Plan

South East

South Australia

December 2000

Department for Environment and Heritage

This plan of management has been prepared
and adopted in pursuance of section 38 of
the *National Parks and Wildlife Act 1972*.

Published by the Department for Environment and Heritage
March 2001

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ISBN 0 7590 1017 X

Prepared by South East Region
National Parks and Wildlife SA
Department for Environment and Heritage

Foreword

This management plan sets out the objectives and actions for the Lower Glenelg River Conservation Park. It has been prepared in accordance with the *National Parks and Wildlife Act, 1972*.

The Lower Glenelg River Conservation Park is located south-east of Mount Gambier in the Lower South East of South Australia. Dedicated in 1993 for the conservation of important vegetation associations and species, the Park is an extension of Victoria's Lower Glenelg National Park, which adjoins it on the eastern boundary. The Glenelg River forms the western boundary. The Park contains an *endangered* vegetation association (Swamp Gum woodland) and several endangered plant species. Two of the endangered species include the Slender Greenhood and Shining Buttercup. The Park provides habitat for a variety of threatened fauna species including the Rufous Bristlebird, Yellow-tailed Black Cockatoo, Peregrine Falcon, and Red-necked Wallaby.

This management plan has been developed to conserve the threatened species of the Park, particularly the numerous endangered plant species, through research, population monitoring and pest species control.

The Lower Glenelg National Park is included in the World List of National Parks and Equivalent Reserves, and encompasses the spectacular Glenelg River's limestone gorge and associated woodlands and heath. Together, the Lower Glenelg River Conservation Park and Lower Glenelg National Park form an important ecological tract. Lower Glenelg River Conservation Park is managed by National Parks and Wildlife South Australia (NPWSA), a unit of the Department for Environment and Heritage, in collaboration with Parks Victoria staff. The Great South West Walk (250 kilometres of walking trail) passes through the Lower Glenelg River Conservation Park providing visitors with an outstanding nature experience. Recreational boating enthusiasts and tour operators are among the variety of visitor groups accessing the Park, via the landing at the Glenelg River.

This plan of management was released in draft form for public review in January 2000. At the close of the period for public consultation, five written submissions had been received. Those comments, and the draft plan, were subsequently reviewed by the Reserve Planning and Management Advisory Committee of the South Australian National Parks and Wildlife Council, resulting in a number of changes being made to the plan text. These changes were subsequently endorsed by Council. Public involvement in the planning process makes a worthwhile contribution to better park management, and those who took the time to make representations are thanked for their efforts.

The management objectives and actions for Lower Glenelg River Conservation Park have not been prepared in isolation but rather in consultation with other agencies and community groups. The location of other DEH reserves and areas of remnant vegetation have also been considered to ensure that Lower Glenelg River Conservation Park is managed in a regional context

The plan of management for the Lower Glenelg River Conservation Park is now formally adopted under the provisions of section 38 of the National Parks and Wildlife Act, 1972.

A handwritten signature in black ink, appearing to read 'I. Evans', written in a cursive style.

The Hon. IAIN FREDERICK EVANS, BAppSc (Building Technology), MP

MINISTER FOR ENVIRONMENT AND HERITAGE
MINISTER FOR RECREATION SPORT AND RACING

Acknowledgements

This park management plan has been prepared in consultation with other agencies, community groups and individuals.

NPWSA staff from Mt Gambier, Southend, and Adelaide have provided considerable assistance, advice and information included in this management plan.

The assistance provided by Parks Victoria staff and Friends of the Great South West Walk, Mount Gambier Field Naturalists Society and Friends of Mount Gambier Area Parks is appreciated. The Lower South East Consultative Committee is involved in the plans development, and their input is appreciated.

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1.0 Introduction

1.1 Planning Process

There is a requirement under Section 38 of the *National Parks and Wildlife Act 1972*, to prepare a management plan for each reserve constituted under the Act. Such plans set forth proposals to manage and improve reserves and the means by which the objectives of the Act will be accomplished. A management plan provides the framework for management of the park by stating the philosophy on which management should be based and by setting out objectives and actions for management. The objectives related to management of reserves are stated in Section 37 of the Act as:

- preservation and management of wildlife
- preservation of historic sites, objects and structures of historic or scientific interest within reserves
- preservation of features of geological, natural or scenic interest
- destruction of dangerous weeds and the eradication of disease of animals and vegetation
- prevention and suppression of bush fires and other hazards
- encouragement of public use and enjoyment of reserves and education in, and a proper understanding and recognition of their purpose and significance and
- generally, the promotion of the public interest.

National Parks and Wildlife South Australia (NPWSA) as a matter of policy invites comments from key agencies, groups and individuals before draft management plans are formally released for comment from the general public. This stage aims to gain a measure of understanding amongst various stakeholders before the subsequent public exhibition period. The Lower South East Consultative Committee was consulted during the preparation of this plan.

Once a draft management plan has been prepared, an announcement is made in the *Government Gazette* and the plan is placed on public exhibition for at least three months. Any person may make submissions in relation to the plan.

The plan and submissions are then referred to the National Parks and Wildlife Council who may make further comments or recommendations to the Minister.

The Minister, after considering all representations, may then adopt the plan with or without alterations. Notice of adoption is published in the *Government Gazette* and copies of the plan are made available to the public.

Once a plan is adopted, the provisions will be carried out in relation to the reserve in question, and no activities will be undertaken in conflict with the management plan. A similar process applies for any amendment proposed to a management plan.

1.2 Park Classification

The classification which a reserve receives on being dedicated under the *National Parks and Wildlife Act 1972* is a general statement of the purpose for which that area was acquired. Examples of such classifications can be found below.

National Parks are areas considered to be of national significance by reason of wildlife or features of that land.

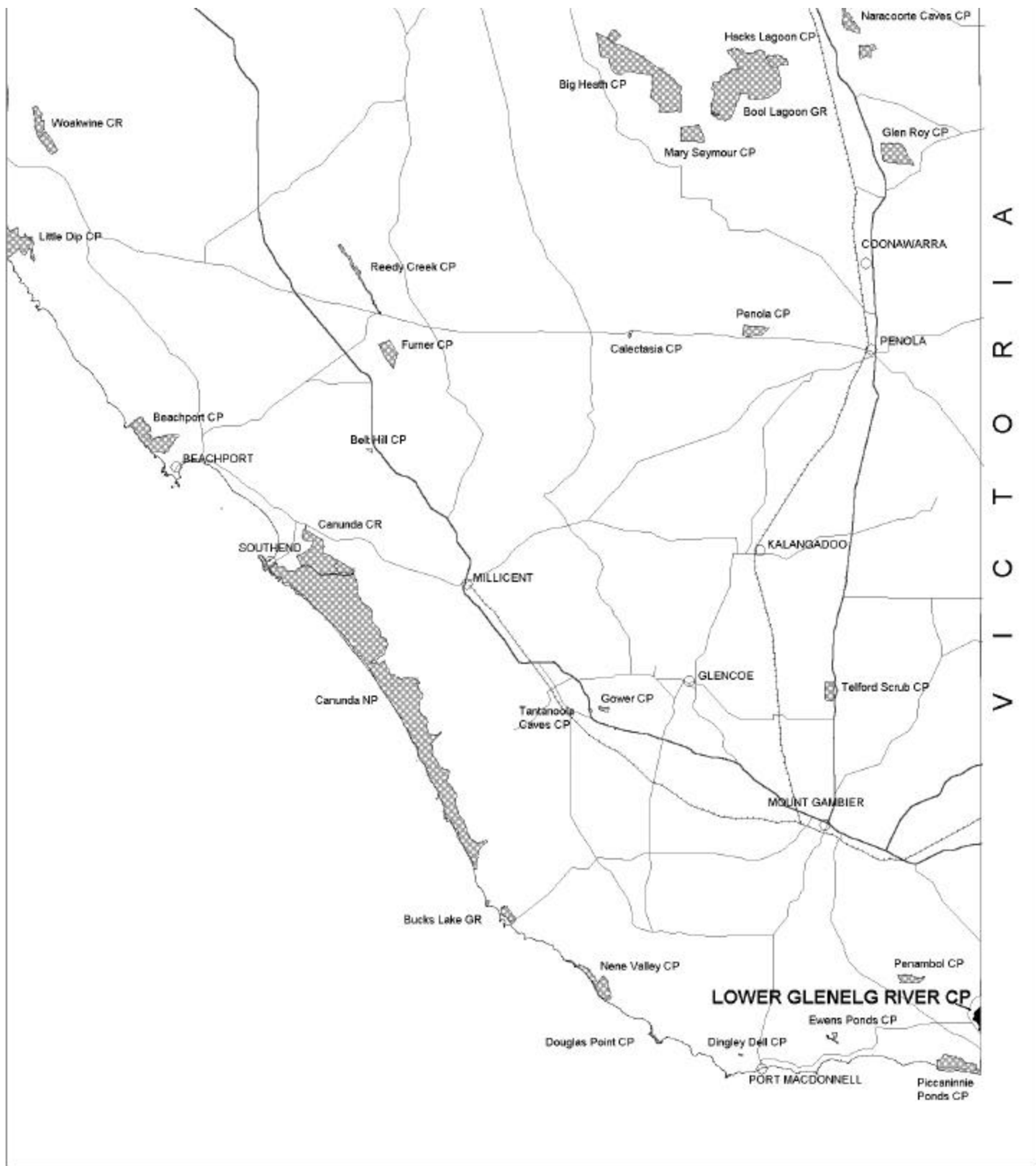
Conservation Parks are areas of land protected for the purpose of conserving any wildlife or the natural or historical features of that land. The development of visitor facilities in conservation parks tends to be kept to a minimum.

Game Reserves are established to conserve wildlife and manage game species. They have an important conservation role and may be declared open at prescribed times for strictly controlled hunting.



Recreation Parks conserve areas of significance, which are managed for public recreation and enjoyment.

Regional Reserves are areas proclaimed for the purpose of conserving any wildlife or the natural or historical features of that land while, at the same time, permitting the utilisation of the natural resources of that land (i.e. mining).

Conservation Reserves are areas set aside for conservation purposes under the *Crown Lands Act, 1929* and held under the care, control and management of the Minister for Environment and Heritage. They are areas with significant conservation values that for various reasons were not proclaimed under the *National Parks and Wildlife Act, 1972*.



V I C T O R I A

-  Lower Glenelg River Conservation Park
-  Other Parks of the South East



- Reserves under NP&W Act
- CP Conservation Park
 - NP National Park
 - GR Game Reserve

- Reserves under the Crown Lands Act
- CP Conservation Reserve

Figure 1
PARKS OF THE LOWER SOUTH EAST
 Location Map

2.0 Management Framework

2.1 Park Description

The Lower Glenelg River Conservation Park is located 25 kilometres south-east of Mount Gambier in the Lower South East of South Australia (Figure 1). The Park covers an area of 127 hectares in sections 603 and 837 of the Hundred of Caroline. The Park is bordered by the Lower Glenelg National Park to the east, and the Glenelg River to the west. The western boundary of the Park, adjacent to the Glenelg River, is fixed. These sections were proclaimed and gazetted in 1993 as the Lower Glenelg River Conservation Park to “conserve important vegetation associations and to extend the Lower Glenelg National Park”.

The Park is characterised by an inland dunal system grading to limestone cliffs, that supports an open sclerophyll forest formation of *Eucalyptus baxteri* and *E. obliqua*. The Park conserves numerous significant vegetation and fauna. *Eucalyptus obliqua* woodland and the *endangered* (Croft *et. al.*, 1999) *Eucalyptus ovata* woodland association dominate the Park’s vegetation structure.

The Lower Glenelg River Conservation Park is noted for its threatened populations including the *nationally vulnerable* Heath Mouse, *vulnerable* (SA) Yellow-tailed Black Cockatoo and Hooded Plover, and the regionally *endangered* Slender Greenhood and Wedge-leaf Daisy.

Prior to the proclamation of Sections 603 and 837 as the Lower Glenelg River Conservation Park, the sections were Native Forest Reserves. This previous land use has had little impact on the area’s values, as it was not utilised for commercial operations. Some introduced plants are present in certain areas of the Park. Other activities such as prescribed burning and grazing have occurred in the past.

The Glenelg River is the largest river, and the only river of any great length navigable by large pleasure craft in the South East and western Victoria (Department of Conservation and Environment, 1991). The River is a source of many visitors to the Park, with boat tours and canoeists stopping at Hirth’s Landing. The Great South West Walk provides visitors with bushwalking opportunities, and links the reserve with the Lower Glenelg National Park in Victoria. As a consequence the area is of considerable significance for nature-based tourism.

2.2 Park Significance

The Lower Glenelg River Conservation Park conserves important vegetation associations, associated species, and is an extension of the lower Glenelg National Park. The Park provides secluded nature-based recreational opportunities in a relatively undisturbed area, and is an attraction for River users.

The Biodiversity Plan for the South East of South Australia (Croft et al., 1999) identifies the area containing the Lower Glenelg River Conservation Park as potential habitat for the *vulnerable* (SA) Southern Brown Bandicoot, and *rare* (SA) Red-necked Wallaby. The plan details regional threats and actions for these species and the *vulnerable* (SA) Yellow-tailed Black Cockatoo, which has been recorded in the Park. The Park supports the *endangered Eucalyptus ovata* woodland vegetation association but does not contribute to a Key Biodiversity Area for conservation as specified by Croft.

Natural Values

- Represents 7% of the remaining native vegetation (1814 hectares) in the Caroline Environmental Association.
- Represents 6.5% of the remaining native vegetation (1954 hectares) in the Hundred of Caroline.
- Is contiguous with the Lower Glenelg National Park and together forms a large ecological tract covering 27 427 hectares.
- Possibly significant to Southern Brown Bandicoot and *nationally vulnerable* Heath Mouse populations.
- Conserves habitat for Australasian Bittern, Rufous Bristlebird and Blue-winged Parrot.
- Supports the *endangered Eucalyptus ovata* woodland vegetation association.
- Conserves numerous regionally endangered plant species, including Leafy Flat Sedge, Slender Green Hood, Rayless Starwort, and Wedge-leaf Daisy.

Cultural Values

- Members of the Boandik Aboriginal clan inhabited the region for thousands of years.
- The Glenelg River was first discovered by the well-known explorer Major Mitchell in 1836.
- In the early 1900's was the home to Charlie Hirth, who lived a solitary life on the River.

Recreation and Tourism Values

- Provides low impact activities that enable visitors to experience and appreciate the natural beauty of the Glenelg River area.
- Recreation opportunities include bushwalking, bird watching, fishing, and picnicking along the River.
- The Great South West Walk passes through the Park providing visitors with established and maintained walking trails.

2.3 Management Obligations

2.3.1 *Simultaneous Proclamation*

The Lower Glenelg River Conservation Park was simultaneously proclaimed in 1993 pursuant to Section 43 of the *National Parks and Wildlife Act, 1972*, to allow the continuation of pre-existing mining access.

Simultaneous proclamation allows entry, prospecting, exploration and mining under the *Mining Act, 1971* and the *Petroleum Act, 1940* subject to the approval of the Minister for Environment and Heritage and the Minister of Primary Industries and Resources to persons in whom existing rights are vested.

In the simultaneous proclamation of Lower Glenelg River Conservation Park, the rights of entry, prospecting, exploration and mining were subject to the following conditions:

- at least 3 months prior to beginning any proposed work, the person must notify and supply information as required to the Minister for Environment and Heritage, and the Minister of Primary Industries and Resources;
- the person must comply with the Minister of Primary Industries and Resources in relation to carrying out work to minimise damage to the land, environment, vegetation or wildlife, and to preserve objects and sites of historic, scientific or cultural significance;
- the person must comply with the provisions of the reserve's management plan.

Additionally, the person undertaking mining works is required to:

- ensure objects and sites of significance, and vegetation and wildlife are not unduly affected by the right to entry, prospecting, exploration and mining;
- take steps to minimise the damage to vegetation;
- maintain work areas in a clean and tidy condition; and
- obliterate and remove all structures upon the completion of the work.

The Lower Glenelg River Conservation Park had no pre-existing mining tenures.

2.3.2 *NPWSA/Parks Victoria Joint Management Agreement*

The location and limited accessibility to Lower Glenelg River Conservation Park from South Australia resulted in management discussions between NPWSA and Parks Victoria, leading to a formal agreement of cooperation between the agencies. This facilitates effective and practical management and resource sharing and enables the Lower Glenelg River Conservation Park and Lower Glenelg National Park to be managed as a contiguous vegetation block.

Within the Park, on-ground works will be carried out in accordance with this plan of management upon its adoption. The agreement is reviewed on a regular basis through the Southern Border Parks Liaison Committee. Fire management is in accordance with the Bushfire Prevention Plan for the Park.

2.3.3 Native Title

The 1992 Mabo decision, in which the High Court recognised the native title of the Meriam people over their traditional lands, was pivotal in overturning the idea that the Australian continent belonged to no one prior to European settlement. Under the *Native Title Act 1993* Aboriginal and Torres Strait Islander people can apply to the courts to have their native title claims recognised.

The National Native Title Tribunal (2000), defines the term ‘Native Title’ as “ the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs that are recognised under Australian Law.” The native title of a particular group depends on the traditional laws and customs of those people, and may change over time. Native title legislation is designed to ensure that those who hold native title have the right to:

- continue to practice their law and custom over traditional lands and waters;
- receive compensation if their land is purchased by the government for development; and
- negotiate over mining developments and mineral exploration on their land.

The Native Title Tribunal (2000) states that native title may exist in areas where it has not been extinguished (removed) including:

- vacant (or unallocated) Crown land
- forests and beaches
- national parks and public reserves
- some types of pastoral lease
- land held by government agencies
- land held for Aboriginal communities
- any other public or Crown lands
- oceans, seas, reefs, lakes, rivers, creeks, swamps and other waters that are not privately owned.

Native title can not over ride any person’s right to own a home, own a pastoral lease or exercise a mining lease or any other valid right.

There is a native title claim by the Gournditch-Mara (Fed Ct No VG6004/98) which was registered on 30 August 1996. The area subject to this application is located in the Western District in Victoria and adjoining territorial seas and also includes the Glenelg River in South Australia, covering in total an area of about 20,360km².

Section 24 of the *Native Title Act 1993* provides for the requirement to notify Native Title Representative Bodies, registered Native Title Claimants or registered Native Title Bodies Corporate, prior to the undertaking of certain activities known as *future acts* that might affect native title. These activities are: Public Works; Management Plans; and Facilities for Services to the Public.

Native Title claims can be determined through the Court process or through an Indigenous Land Use Agreement (ILUA). ILUA's are agreements outside the courts between native title claimants and other people who have an interest in the land covered by the claim (eg NPWSA). They can cover a wide range of issues, including how "on the ground" activities can be carried out, and how future decisions should be made.

2.4 Management History

Lower Glenelg River Conservation Park is managed by NPWSA, South East Region. District staff are located at Mount Gambier, Tantanoola, Southend and Robe.

NPWSA utilise a broad range of resources to assist in the management of Lower Glenelg River Conservation Park. This workforce includes rangers, construction and maintenance workers, Parks Victoria staff, contract employees, Friends of Mount Gambier Area Parks Inc., Mount Gambier Field Naturalists Society and Friends of the Great South West Walk. The Lower South East Consultative Committee provides NPWSA with a means of obtaining public input into park management.

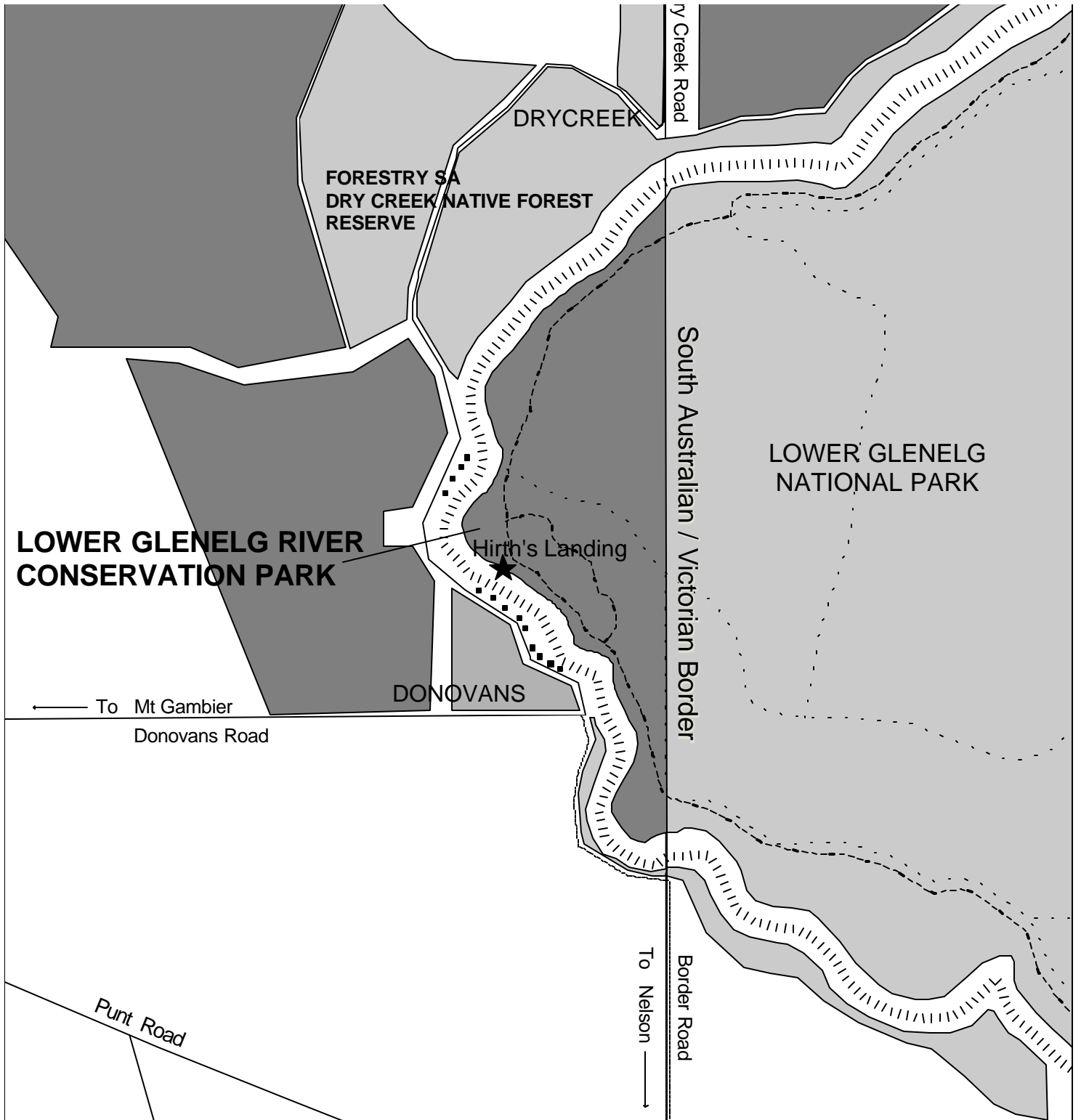
The assistance provided by the above volunteers and organisations in the past has helped to achieve management objectives and actions under the *National Parks and Wildlife Act, 1972*, and their future involvement will assist in the implementation of this plan.

Management within Lower Glenelg River Conservation Park has been directed to the control of weed and vermin pests, with additional works focused upon cultural management, and fire prevention. The spread of *Pinus radiata* trees within the Park is aided by the close proximity of pine plantations for distribution of seeds. Without removal programs being implemented, the species has the potential to spread throughout the Park. The NPWSA have coordinated annual pine removal utilising the Mount Gambier Field Naturalists and Friends of the Mount Gambier Area Parks.

Vermin control is focused upon the control of European Rabbits and Red Foxes. The control of rabbits, particularly, has been important for the conservation of the numerous endangered plant species found in the Park.

The development of the Loop Walking Trail, by NPWSA and the Friends of the Great South West Walk, has aided the linking of the Great South West Walk to Hirth's Landing. The upgrade of the steps from Hirth's Landing to the Great South West Walk has enabled visitors to access Hirth's Landing more easily.

NPWSA has developed a Bushfire Prevention Plan for the Park, to minimise the risk of wildfire spread and provide direction for fire suppression activities. Access tracks for fire vehicles and for use as fire breaks have been developed along part of the border and into the Park.



- | | | | |
|--|-----------------------------|--|-------------------|
| | Two Lane Access (sealed) | | Native Vegetation |
| | Two Lane Access (unsealed) | | Pine Plantations |
| | Management/Emergency Tracks | | |
| | Great South West Walk | | |
| | Glenelg River | | |
| | Township/Buildings | | |



Figure 2

LOWER GLENELG RIVER CONSERVATION PARK

3.0 Park Management Plan

3.1 Biodiversity

3.1.1 Co-operative Management

The Lower Glenelg River Conservation Park is registered on the National Estate as a reserve containing ‘good quality flora, is of appreciable size and forms the western extension of the Lower Glenelg National Park’ (Australian Heritage Commission, 1998a).

The Lower Glenelg River Conservation Park and Lower Glenelg National Park form a large contiguous ecological structure, covering 27 427 hectares. The maintenance of biodiversity in the small Conservation Park is dependant on a co-operative approach to management for the conservation of populations and management of numerous threatened species.

The Park is one of two reserves contained within the Caroline Environmental Association (Laut *et al*, 1977). The Park represents 7% of the remaining native vegetation (1814 hectares) in this association. Penambol Conservation Park contributes a further 12%. Lower Glenelg River Conservation Park also represents 6.5% of the remaining native vegetation (1954 hectares) in the Hundred of Caroline (Department of Environment and Planning, 1987). Piccaninnie Ponds and Penambol Conservation Parks are also included in this Hundred.

Objectives

- Maintain the biodiversity and community integrity of the Park.

Actions

- Liaise with Parks Victoria to identify opportunities for incorporating biodiversity management actions across the Lower Glenelg River Conservation Park and Lower Glenelg National Park.
- Maintain the current co-operative management arrangement.

3.1.2 Fire Management

The Australian fauna and flora has evolved and adapted to the event of fire and many ecosystems now rely upon its influence to maintain the community composition and structure. A change in fire regime can modify this by favouring either fire dependant or fire sensitive species, depending on whether frequency is increased or decreased. Too frequent fires can also impact negatively on fire dependant species by not allowing enough time for recruitment. Intensity and seasonality are significant factors.

It is not feasible to determine and implement a prescribed burning regime for the small area of the Lower Glenelg River Conservation Park. Parks Victoria has a prescribed burning program for the adjacent Lower Glenelg National Park based on Priority Burning Zones and Reference Areas. The area of Park adjacent to the Lower Glenelg River Conservation Park is zoned to allow prescribed burning “for vegetation or habitat management as required”.

Fire management in NPWSA reserves is based on guidelines and objectives contained in the Fire Management and Protection Manual (1989) and Bushfire Prevention Plans. The Fire Management and Protection Manual is an internal report which sets out objectives of fire management and the NPWSA’s fire policy and guidelines.

The objectives of fire management as stated in the Manual are to:

- Protect human life and the assets of properties adjacent to parks;
- Foster sound land use planning in relation to fire hazard;
- Maintain diversity of native plant and animal communities;
- Protect special features including cultural sites and park facilities; and
- Manage fire, thus protecting the land from degradation by erosion and subsequent invasion by weeds.

Croft *et al* (1999) list the following as important factors to benchmark fire management:

- prevent a single fire event from burning an entire vegetation island;
- restrict the burning of any one vegetation community to less than 25%; and
- prevent a fire entering a community that has experienced wildfire in the last 20 years.

In accordance with the *Country Fires Act, 1989* a Bushfire Prevention Plan has been developed for the Park. The plan summarises the risks and hazards associated with and surrounding the Park. The plan recognises the need to plan prevention works and suppression strategies in co-operation with Parks Victoria, and the Country Fire Service.

An ongoing, total fire ban exists throughout the Park.

Objectives

- Maintain the biodiversity and community integrity of the Park.
- Protect people and property from damage by wildfire.

Actions

- Encourage research into the likely plant and animal responses to fire.
- Determine the need for fire in managing specific species.

- Collaborate with Parks Victoria on any plans to undertake prescribed burning for vegetation or habitat management in the vicinity of the Park.
- Review the Bushfire Prevention Plan with Parks Victoria on an annual basis.
- Review the Bushfire Prevention Plan to address the benchmark criteria specified by Croft *et al* (1999).
- Prohibit the lighting of fires throughout the year, through signage and enforcement.

3.1.3 Native Animals

The diverse nature of the Park provides habitat suitable for many different animal species ranging from birds, mammals, amphibians, reptiles and invertebrates.

A comprehensive animal survey has not been undertaken and the list of animal species is likely to increase with further investigation. Significant mammal species likely to inhabit the Park are the *vulnerable* (SA) Southern Brown Bandicoot (*Isoodon obesulus*), the *rare* (SA) Red-necked Wallaby (*Macropus rufogriseus*) and the *nationally vulnerable* Heath Mouse (*Pseudomys shorridgei*). The *endangered* (SA) Azure Kingfisher (*Alcedo azurea*) is also likely to inhabit the Park. These species have been recorded nearby in the Lower Glenelg National Park.

A bird list compiled by A.C. Beaglehole in 1963 includes the following species of high conservation significance within the South East:

Australasian Bittern	<i>Botaurus poiciloptilus</i>	Vulnerable (SA & SE)
Yellow-tailed Black Cockatoo	<i>Calyptorhynchus funereus</i>	Vulnerable (SA & SE)
Rufous Bristlebird	<i>Dasyornis broadbenti</i>	Vulnerable (SA & SE)
Crested Shrike-tit	<i>Falcunculus frontatus</i>	Vulnerable (SA & SE)
Blue-winged Parrot	<i>Neophema chrysostoma</i>	Vulnerable (SA & SE)
Olive Whistler	<i>Pachycephala olivacea</i>	Vulnerable (SA & SE)
Peregrine Falcon	<i>Falco peregrinus</i>	Rare (SA & SE)
Golden headed Cistacola	<i>Cistacola exilis</i>	Rare (SA & SE)

(SA status from *NP&W Act, 1972*, SE status from Carpenter and Reid, 1988)

Introduced animals such as the Red Fox (*Vulpes vulpes*), Feral Cat (*Felis catus*) and European Rabbit (*Oryctolagus cuniculus*) occur. These species have the potential, if uncontrolled, to compete with and predate upon native fauna and flora.

Objectives

- To protect and conserve indigenous fauna with an emphasis on the rare and vulnerable species and their habitats.
- To encourage research into the rare and vulnerable fauna species.
- To increase the knowledge of the fauna in the Park.
- To control introduced animals that are an environmental threat.

Actions

- Encourage volunteer groups and individuals to conduct fauna surveys and population monitoring.
- Review existing research on rare and vulnerable species and its applicability to management.
- Promote research into the biology and habitat requirements of rare and vulnerable species in the Park.
- Liaise with tertiary institutions, to facilitate research, to meet any knowledge gaps.
- Develop and implement a fox and rabbit control program for the Park, in collaboration with Parks Victoria.
- Liaise with Parks Victoria and the Grant Animal and Plant Control Board Authorised Officer to determine appropriate methods for feral cat control.

3.1.4 Native Plants

The vegetation in the Lower Glenelg River Conservation Park varies from low Stringybark forest and heath, to open Swamp Gum forest. The vegetation communities existing in the Park as described by the Woods and Forest Department (1958) and Croft (2000) include:

- Brown Stringybark (*Eucalyptus baxteri*)/Messmate Stringybark (*E. obliqua*) open forest - in a sandy soil with an understorey of predominantly Wattle, Yacca and Bracken Fern (*Pteridium esculentum*).
- *Swamp Gum (*E. ovata*) woodland in a shallow stony soil with an understorey of Heath species.
- Messmate Stringybark (*E. obliqua*) low open forest - in a shallow stony soil with an understorey of Wattle and Yacca species.

* = Listed as an *endangered* vegetation association for the region (Croft et. al., 1999).

The Swamp Gum (*Eucalyptus ovata*) low open forest vegetation association is also found in the Penola and Telford Scrub Conservation Parks, and Forestry SA Native Forest Reserves.

In September 1976 Portland naturalist A.C. Beaglehole A.M. and local naturalists identified 295 plant species, of which over 42 species are of conservation significance. The conservation significance of the plants listed below has been determined from three sources, Lang and Kraehenbuel (1994), Croft and Carpenter (1996) and *NP&W Act (1972)*.

		<u>Regional Status</u>	<u>SA Status</u>
Leafy Flat Sedge	<i>Cyperus lucidus</i>	Endangered	
Golden Moths	<i>Diuris lanceolata</i>	Endangered	
Slender Green Hood	<i>Pterostylis foliata</i>	Endangered	Rare
Wedge-leaf Daisy	<i>Brachycome cuneifolia</i>	Endangered	
Milky Beauty Heads	<i>Calocephalus lacteus</i>	Endangered	
Rayless Starwort	<i>Stellaria multiflora</i>	Endangered	Rare
Shining Buttercup	<i>Ranunculus glabrifolius</i>	Endangered	
?Australian Clematis	<i>Clematis aristata</i>	Vulnerable	
Clover Glycine	<i>Glycine latrobeana</i>	Vulnerable	Vulnerable
Hairy Rice-grass	<i>Tetrarrhena distichophylla</i>	Vulnerable	Vulnerable
Dwarf Aphelia	<i>Aphelia pumilio</i>	Vulnerable	

? =Single sterile plant collected by A.C. Beaglehole (Mitchell, 2000)

The Lower Glenelg River Conservation Park records for the Slender Green Hood and Shining Buttercup are the only records from the South East region.

Very little disturbance occurred in this park during previous ownership. This stable state has continued under the management of NPWSA, with the extension of the Great South West Walk into the Park being the only development.

Introduced plant species do exist in the Park. The main species of concern is *Pinus radiata*, which has the potential to eliminate native species. The neighbouring pine plantations are a source of infestation, with a large number of seeds dispersing via the wind and fauna into the Park. Each year members of Mount Gambier Field Naturalists Society remove small pines from the Park reducing the competition with, and enhancing the regeneration of, native species. The introduced plants at Hirth's landing also require management. Currently Tasmanian Blue Gums, thistles, Bridal Creeper and other species can be found near the boat landing. South African Weed Orchid can be found one to two kilometres north-west of the park in the adjacent pine plantations, and has the potential to invade the park.

Objectives

- To protect and conserve indigenous flora with an emphasis on vulnerable and endangered species and associated communities.
- To encourage research into the vulnerable and endangered flora species.
- To increase the knowledge of the flora in the Park.
- To control introduced plants which are environmental threats.

Actions

- Encourage flora surveys and population monitoring of the Park's flora, especially vulnerable and endangered species.
- Identify populations of vulnerable and endangered species within the Park, to enable population monitoring and research into species ecology.
- Identify threatening processes (eg visitor disturbance) to vulnerable and endangered species and associations and implement measures to alleviate threats.
- Review existing research on threatened species, particularly those classified as vulnerable and endangered and its applicability to management, and implement.
- Liaise with tertiary institutions to facilitate research, to meet any knowledge gaps in vulnerable and endangered species ecology.
- Liaise with Parks Victoria to identify opportunities for co-operative management programs for vulnerable and endangered species, particularly Slender Green Hood and Shining Buttercup.
- Develop and implement, in consultation with Parks Victoria, an introduced plant control program, particularly aimed at *Pinus radiata* and species at Hirth's Landing.
- Continue to encourage volunteer groups to remove introduced plants from the Park.
- Allow revegetation to take place in degraded areas.

3.2 Cultural Heritage

Human habitation of Australia began with the movement of Meganesians down from South East Asia to Australia at least 40 000 years ago, possibly 60 000 years ago (Flannery, 1994). Flannery describes the occupation of Australia to have likely been “a rapid and complete invasion by the ancestors of the Aborigines.” The discovery of Aboriginal remains at Lake Mungo, New South Wales (32 000 years old) and south-west Tasmania (35 000 years old) validates this hypothesis of Aboriginal occupation of Australia. Consequently, the establishment of Aboriginal cultures and tribe differentiation, in the Lower South East, took place at least 35 000 years ago.

The Aborigines inhabiting the reserve were known as the Boandik, one tribe among four others belonging to a larger group known as the 'Bunganditj'. Campbell, Cleland and Hossfield (1946) wrote that the Boandik tribe inhabited an area from the Glenelg River (in the south) up to Rivoli Bay (in the north) including land 50 kilometres inland. The past misunderstandings of the complex culture of the local Aborigines and the lack of detailed cultural study have restricted the quantity and quality of information available to general details of tribal life.

No specific information exists on the Aboriginal people of the Lower Glenelg River Conservation Park area. O'Connor (1992) and Campbell (1934) have indicated that the region was rich in resources with shellfish and crustaceans commonly harvested by Boandik tribes from the River, sea and nearby lake areas. There was a wide choice of animals including kangaroos, wombats, emus, lizards and snakes and a variety of roots

and berries, which complemented their dietary needs. The Boandik preferred pigface along the coastal areas, which served as their main source of salt.

Major Mitchell was the first known European to discover the Glenelg River in July of 1836. He named the River after Lord Glenelg who was the Secretary of the ‘State of the Colonies’ when South Australia was first founded. Directly across the River from the Lower Glenelg River Conservation Park is the small township of Donovans. This township was named after Mr Thomas John Donovan who owned land in this area. In the late 1940’s Mr Donovan decided to sub-divide some of his land in the Hundred of Caroline which resulted in the formation of the township. Before sub-division, the area was known as ‘Donovans Landing’ (Manning, 1990). Donovans has been a popular local district recreation area with many shacks and landings constructed along the edge of the River (Figure 2).

A Pastoral Lease was undertaken in 1851, in the area now occupied by the Lower Glenelg River Conservation Park. In 1862, the Hundred of Caroline was proclaimed, with the subsequent issuing of a Miscellaneous Lease (Grazing and Cultivation) over Section 603, in 1882. Successive Miscellaneous Leases for Grazing and Cultivation purposes were issued up to 1908, when a Perpetual Lease was issued. The lease was resumed in 1928.

From the mid 1900’s Section 603 Hundred of Caroline was a Native Forest Reserve under the care and control of the Minister for Forests. The land was assessed as being unsuitable for commercial softwood plantations (Woods and Forest Department, 1958), and was three years later proclaimed a Forest Reserve. A formal agreement was established with the National Trust of South Australia to manage the land for a Native Flora and Fauna Reserve in 1963. The land was rededicated in 1975 and became part of the Caroline Forest Reserve (excluding a 30 metre-wide waterfront reserve, Section 837). In 1993, Section 603 and 837 were proclaimed as the Lower Glenelg River Conservation Park.

Hirth’s Landing is an area along the River, which is of significance to the Park’s cultural values. The landing was named after the late Charlie Hirth who built a small dwelling here in the early 1900’s. He lived a relatively solitary life utilising the River for fish and crabs and growing fruit and vegetables. Many of the original trees he planted still exist. Mr Hirth travelled up river to Dartmoor each Christmas to spend time with family, a trip that took him three days in his wide, flat bottomed boat (McBain, 1998). Mr Hirth journeyed to Mount Gambier periodically by bicycle. Charlie Hirth died in 1965. Some evidence of his hut still exists.

Objective

- To ensure the protection and preservation of any archaeological relics and cultural sites that may exist in the Park.
- To record the cultural history of the area.

Action

- Consult with the Aboriginal community and Division of State Aboriginal Affairs to improve knowledge of the area and to seek involvement in the protection of any identified cultural sites.
- Further research and record local history for use in interpretive material, and on-site signs.
- Maintain records on the cultural history of the Lower Glenelg River Conservation Park area.
- Maintain the remains of Hirth's dwelling at the landing area.

3.3 Recreation and Tourism

The Lower Glenelg River Conservation Park offers recreation opportunities such as bushwalking, bird watching, fishing, and picnicking along the River and amongst the dense woodlands and heath. Vehicle access is for management and emergency vehicles only. Access for visitors is by foot (via the Lower Glenelg National Park) or boat with tourists and field naturalists being common visitors to this park.

Two and a half kilometres of maintained walking trails exist throughout the Park. These trails were constructed by the Friends of the Great South West Walk in 1988, with the new loop trail and some realignment added in 1998 (Figure 2).

The Glenelg River and associated ecosystems are tourist destinations with canoeing, fishing, water skiing, sight-seeing and other boating activities (e.g. commercial tours) contributing to the areas popularity. It is important that the use of the Lower Glenelg River Conservation Park (whether by individuals or groups) is appropriate and in accordance with the *National Parks and Wildlife Act, 1972*, and the management objectives and actions outlined in this management plan.

Low impact special interest activities that increase the appreciation and understanding of the natural environment are encouraged in this area. A local tour operator has established a boat landing and picnic facilities under licence. Camping is not currently permitted, as this activity is well catered for at numerous locations in the Lower Glenelg National Park (Victoria). The lighting of fires is prohibited within the Park.

Objectives

- To provide recreation opportunities for visitors where a need is demonstrated and where those activities maximise the appreciation of the natural values of the Park.
- To increase public awareness, appreciation and understanding of the Park's values.

Actions

- Maintain basic day visitor facilities (picnic area, steps, and signage) to accommodate existing need.
- Investigate the need to provide for camping in consultation with Parks Victoria.
- Provide specific information signs in strategic locations regarding public safety and walking access.
- Investigate opportunities for increasing public awareness and understanding of the Park's values.
- Liaise with user groups regarding facilities, access requirements, and NPWSA standards for bushwalking, canoeing, and boating tours.
- Provide for commercial use of the Park through a Commercial License under Section 35(3) of the *National Parks and Wildlife Act 1972*.
- Monitor impacts of activities in the Park and make changes to management practices if considered necessary.
- Ensure regular maintenance of walking trails and the boat landing at Hirth's Landing.

4.0 Summary of Management Actions

This section provides a summary of the management proposals outlined in the plan and gives an indication of the priority and duration of each proposal.

Actions	Priority	Duration
3.1 Biodiversity		
3.1.1 Co-operative Management		
• Liaise with Parks Victoria to identify opportunities for incorporating biodiversity management actions across the Lower Glenelg River Conservation Park and Lower Glenelg National Park.	High	Ongoing
• Maintain the current co-operative management arrangement.	High	Ongoing
3.1.2 Fire Management		
• Encourage research into the likely plant and animal responses to fire.	High	Ongoing
• Determine the need for fire in managing specific species.	High	Short
• Collaborate with Parks Victoria on any plans to undertake prescribed burning for vegetation or habitat management in the vicinity of the Park.	High	Ongoing
• Review the Bushfire Prevention Plan with Parks Victoria on an annual basis.	Med.	Ongoing
• Review the Bushfire Prevention Plan to address the benchmark criteria specified by Croft <i>et al.</i> (1999).	Med.	Short
• Prohibit the lighting of fires throughout the year, through signage and enforcement.	High	Ongoing
3.1.3 Native Animals		
• Encourage volunteer groups and individuals to conduct fauna surveys and population monitoring.	High	Ongoing
• Review existing research on rare and vulnerable species and its applicability to management.	High	Ongoing
• Promote research into the biology and habitat requirements of rare and vulnerable species in the Park.	Med	Ongoing
• Liaise with tertiary institutions, to facilitate research, to meet any knowledge gaps.	High	Mod.
• Develop and implement a fox and rabbit control program for the Park, in collaboration with Parks Victoria.	High	Ongoing
• Liaise with Parks Victoria and the Grant Animal and Plant Control Board Authorised Officer to determine appropriate methods for feral cat control.	High	Ongoing

3.1.4 Native Plants

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|---|------|---------|
| • Encourage flora surveys and population monitoring of the Park's flora, especially vulnerable and endangered species. | High | Ongoing |
| • Identify populations of vulnerable and endangered species within the Park, to enable population monitoring and research into species ecology. | High | Ongoing |
| • Identify threatening processes (eg visitor disturbance) to vulnerable and endangered species and associations and implement measures to alleviate threats. | High | Ongoing |
| • Review existing research on threatened species, particularly those classified as vulnerable and endangered and its applicability to management and implement. | High | Short |
| • Liaise with tertiary institutions to facilitate research to meet any knowledge gaps in vulnerable and endangered species ecology. | Med. | Short |
| • Liaise with Parks Victoria to identify opportunities for co-operative management programs for vulnerable and endangered species, particularly Slender Green Hood and Shining Buttercup. | Med. | Ongoing |
| • Develop and implement in consultation with Parks Victoria an introduced plant control program, particularly aimed at <i>Pinus radiata</i> and species at Hirth's Landing. | Med. | Ongoing |
| • Continue to encourage volunteer groups to remove introduced plants from the Park. | High | Ongoing |
| • Allow revegetation to take place in degraded areas. | Med. | Ongoing |

3.2 Cultural Heritage

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|---|------|---------|
| • Consult with the Aboriginal community and Division of State Aboriginal Affairs to improve knowledge of the area and to seek involvement in the protection of any identified cultural sites. | High | Ongoing |
| • Further research and record local history for use in interpretive material, and on-site signs. | Med. | Ongoing |
| • Maintain records on the cultural history of the Lower Glenelg River Conservation Park area. | Med. | Ongoing |
| • Maintain the remains of Hirth's dwelling at the landing area. | Med. | Ongoing |

3.3 Recreation and Tourism

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|---|------|---------|
| • Maintain basic day visitor facilities (picnic area, steps and signage) to accommodate existing need. | High | Ongoing |
| • Investigate the need to provide for camping in consultation with Parks Victoria. | Med. | Short |
| • Provide specific information signs in strategic locations regarding public safety and walking access. | High | Short |
| • Investigate opportunities for increasing public awareness and understanding of the Park's values. | Med. | Ongoing |
| • Liaise with user groups regarding facilities, access | High | Short |

requirements, and NPWSA standards for bushwalking, canoeing, and boating tours.

3.3 Recreation and Tourism (Continued)

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|--|------|---------|
| • Provide for commercial use of the Park through a Commercial License under Section 35(3) of the <i>National Parks and Wildlife Act 1972</i> . | Med. | Ongoing |
| • Monitor impacts of activities in the Park and make changes to management practices if considered necessary. | High | Ongoing |
| • Ensure regular maintenance of walking trails and the boat landing at Hirth's Landing. | High | Ongoing |

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