

MAIZE ISLAND LAGOON CONSERVATION PARK and MARNE VALLEY CONSERVATION PARK MANAGEMENT PLAN

Murraylands

SOUTH AUSTRALIA



National Parks and Wildlife
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

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**This plan of management has been prepared and
adopted in pursuance of section 38 of the
National Parks and Wildlife Act, 1972-81**

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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

FOREWORD

This document is the Management Plan for Maize Island and Marne Valley Conservation Parks and has been adopted pursuant to the National Parks and Wildlife Act 1972. The draft was released for public comment in August 1993. One public submission was received and was taken into consideration in the preparation of this Plan.

The Parks are located in the Murraylands Region of the Department of Environment and Natural Resources. Maize Island is a popular recreation site, particularly for river-based activities and camping. In contrast Marne Valley has few visitors. Interest in the Park is mainly to observe the fauna and flora it contains.

This Plan outlines proposals to effectively balance the recreational use of the Parks while conserving the natural and cultural values of the Park.

The Berri office of the Department of Environment and Natural Resources maintains records and resource information on the Parks. This information can be accessed by the general public.

David Wotton

MINISTER FOR THE ENVIRONMENT AND NATURAL RESOURCES

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MANAGEMENT CONTEXT

Conservation Parks in South Australia

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 of land was acquired. Conservation parks are lands that should be protected or preserved to conserve wildlife, natural or historic features which they contain.

Conservation is part of a regional pattern of land use. Other land uses such as agriculture, forestry and mining are distinguished by community acceptance of environmental modification. The management of SANPWS reserves aims to minimise disturbance to natural and cultural resources while providing for public use and enjoyment, and is a significant component of regional land use.

Location and Regional Context

Maize Island Lagoon Conservation Park is located on the southern side of the River Murray, two kilometres east of Waikerie (Figure 1). The Park covers an area of 214 ha, and comprises Sections 365, 427, 435, 470, 496, 497, 529, and 530, Division of Holder. The Park was dedicated in 1966.

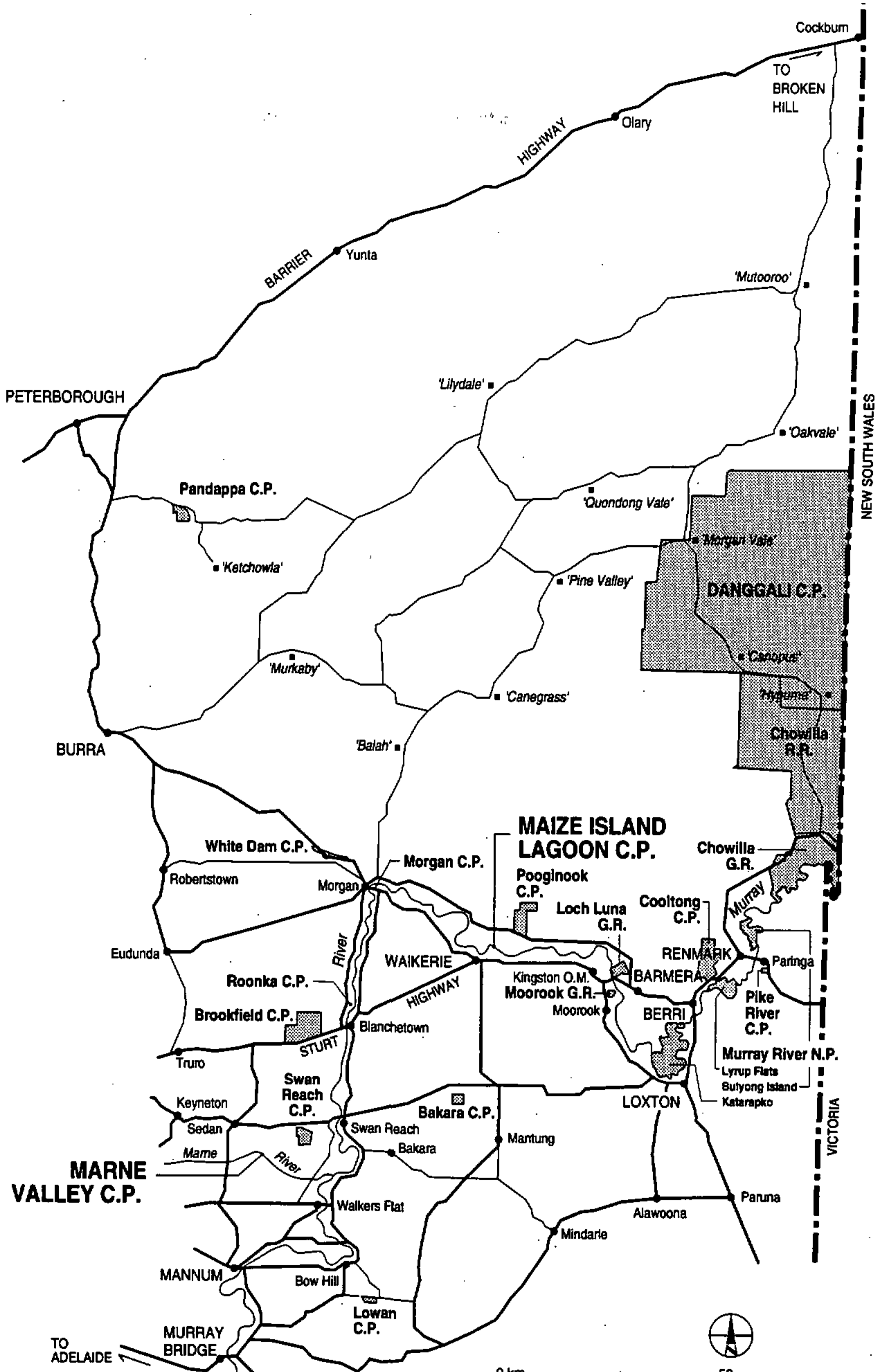
The landscape is gently undulating, with much of the Park comprising low lying, seasonally inundated river red gum (*Eucalyptus camaldulensis*) flats.

The Park is a popular recreation site, particularly for river-based activities and camping. Visitation is highly seasonal, occurring largely in summer, with the majority of visitors originating from within the region.

Marne Valley Conservation Park is located 30km north of Mannum, and 10km south east of Sedan. (Figure 1). The Park covers an area of 105 ha, and comprises Sections 4, Hundred of Angas. The Park was dedicated in 1976.

This Park is bisected by the Marne River. The landscape is gently undulating, with much of the Park comprising low lying, seasonally inundated river red gum (*Eucalyptus camaldulenses*) flats.

The Park has few visitors. Interest in the Park is mainly to observe the fauna and flora it contains. Visitors from the local area also use the Park for social events.



- Sealed Road
- Unsealed Road
- N.P. National Park
- C.P. Conservation Park
- G.R. Game Reserve
- R.R. Regional Reserve

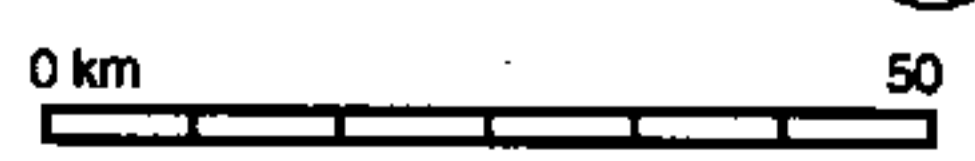


Figure 1
Maize Island Lagoon and Marne Valley Conservation Parks Location Map

Objectives of Management

The *National Parks and Wildlife Act, 1972* describes the general objectives of managing conservation parks in South Australia as:

- preservation and management of wildlife;
- preservation of historic sites, objects and structures of historic or scientific interest;
- preservation of features of geographical, natural or scenic interest;
- destruction of dangerous weeds and eradication or control of noxious weeds and exotic plants;
- control of vermin and exotic animals;
- control and 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.

MAIZE ISLAND LAGOON CONSERVATION PARK

1 PARK DESCRIPTION

The Murraylands area has a climate with cool winters and warm to hot summers. Diurnal and seasonal temperature variations can be significant, and because the area is in the rainshadow of the Mount Lofty Ranges, it is considered within the southern-most extension of the arid zone in South Australia. Annual rainfall is low and irregular averaging 250mm, with a slight winter and spring predominance. Evaporation is very high during summer months, and the average monthly evaporation exceeds the rainfall in every month of the year.

Laut et al. (1977) place Maize Island Lagoon Conservation Park in the Upper Murraylands Environmental Region of the Murray Mallee Province. The Park is contained within the Renmark Environmental Association, which is characterised by incised ancestral floodplains with a variety of fluvial landforms including discontinuous levees, oxbows, backswamps, lakes and low terraces. Near-vertical cliffs border the old floodplain. Soils are deep, well drained, brown siliceous sands. This Region has largely been cleared for grazing, cropping, and irrigation, and contains only scattered remnants of native vegetation.

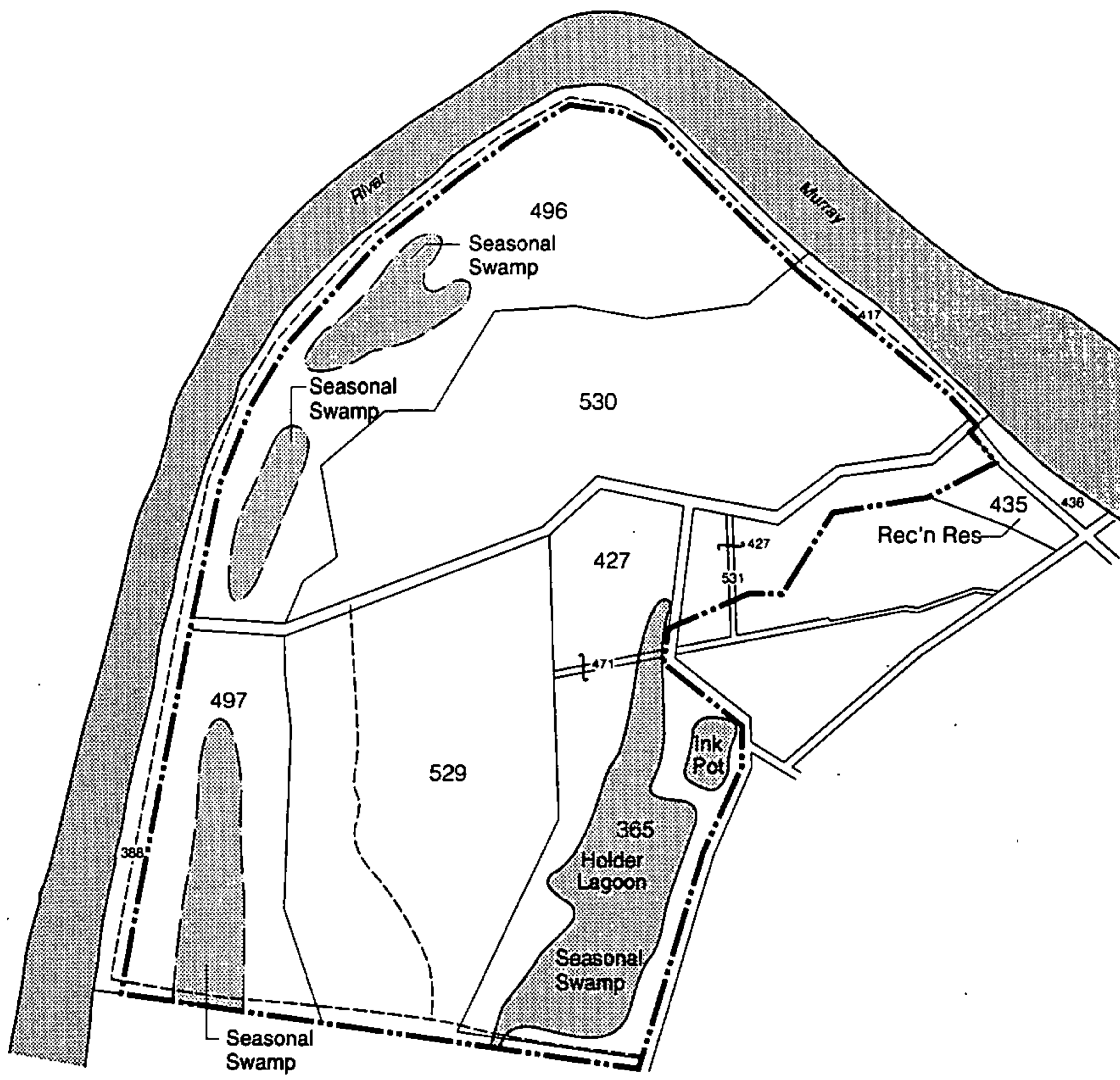
Three environmental associations have been identified in the Park as:

- river red gum and river box (*E. largiflorens*) Woodland to Open Woodland, with an understorey of lignum (*Muehlenbeckia cunninghamii*), grasses and sedges, in low-lying areas;
- lignum Open Scrub with areas of river red gum seedlings, also found in low-lying areas; and
- a Tussock Grassland of exotic grasses and ephemerals in the cleared central part of the Park.

Large portions of the Park are low-lying and were subject to regular flooding prior to control of water levels in the River Murray. Up to two-thirds of the low-lying portion of the Park would be inundated by a 6 to 7 year frequency flood, such as those of 1974 and 1976 (Gutteridge et al. 1986). One large seasonally inundated lagoon is divided by the main access road. (Figure 2).

No detailed surveys of the fauna and flora of the Park have been conducted. It is possible that several significant arboreal and terrestrial small mammal species may still be present. The brush tailed possum and water rat are two such species of significance which are known to be in the region, but which require further study.

During flood periods the Park supplies nesting habitat for numerous waterbird species.



- Park Boundary
- - - Track
- ==== Road Reserve

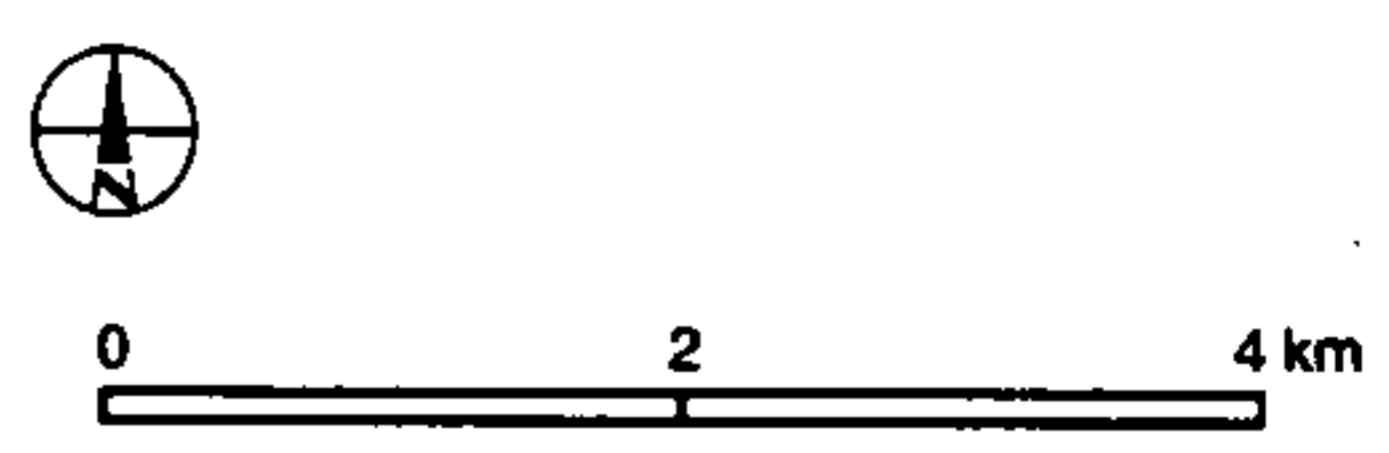


Figure 2
Maize Island Lagoon Conservation Park
Features and Concepts

Fox (*Vulpes vulpes*) predation on tortoises is an issue of concern throughout the Murraylands, however the extent and impact of this predation on the long term viability of tortoise populations is not clearly understood.

Rabbits (*Oryctolagus cuniculus*) occur in the Park, particularly in cleared areas, or those infested with pest plants such as African boxthorn (*Lycium ferocissimum*). Other agricultural pest species are present in the Park, as are numerous exotic trees.

The Ngawait tribe occupied this area. No archaeological survey work has been done in the Park, but the region is known to be rich in sites and artefacts.

The area the Park now occupies was part of a large agricultural property. Homestead buildings, extensive clearing, fruit trees and old farm machinery attests to irrigated fruit block activity in the Park.

Modern recreational use of the Park is short term and highly seasonal. Although some visitors stop at the Park while "driving through", the majority camp on long weekends and during school holidays along the River front on the crown land between the Park and the River. Visitors activities associated with the river include mooring speedboats, swimming, water skiing, yabbing, and fishing. Nature observation and horseriding occur in the Park.

Large sections of the Park boundary are not fenced or the existing fence is in very poor condition. Numerous tracks cross the Park, and a central road reserve runs west to east (Figure 2).

2 MANAGEMENT PRESCRIPTION

Policies for the management of the Park, summarised below, have been developed within the constraints of:

- the *National Parks and Wildlife Act, 1972 and Regulations*;
- State Government policy;
- Department of Environment and Natural Resources (DENR) policies; and
- community attitudes and expectations at State, regional and local levels.

2.1 Natural Resources

Maize Island Lagoon Conservation Park provides waterbird habitat, particularly in years of flood. The basis of flora and fauna management for the Park is to conserve the area for maximum diversity of naturally occurring species and communities, and to control pest plant species which have invaded the Park.

The Park is not particularly susceptible to fire, except in extremely dry seasons. Fire management will be in accordance with the SANPWS Fire Management and Protection Manual (1988) and the Park Fire Protection Plan, with a general thrust that fires will be suppressed. See section 2.3.2 regarding solid fuel fires.

A pest plant management program for the Park has been developed. Pest plant infestations are recorded and monitored. Species which are to be eradicated from the Park are African boxthorn, and golden dodder. In addition numerous exotic trees in the old homestead area should be removed. The pest plant control program will utilise revegetation, particularly in the irrigated fruit block area, to control pest plants through competition, and to improve the habitat value of the Park. The substantial size of the cleared portions of the Park will probably necessitate the use of direct seeding techniques in revegetation.

Part of the rehabilitation plan for the homestead area will comprise the demolition and burial of the ruins of the old house and outbuildings.

A control program for animal pests in the Park has been implemented. Rabbit control is undertaken in conjunction with pest plant control (particularly African boxthorn), to ensure exotic rabbit harbour is removed.

Dogs are not permitted on the Park.

The Park is only fenced along portions of its boundaries. Some sections of the boundary fences are in need of upgrading. Establishing and maintaining boundary fences, in coordination with neighbouring property holders is a significant element in ensuring stock do not gain access to the Park, and in controlling vehicle access.

Action	Priority
• implement pest animal and plant control programs	High
• protect habitat by controlling access and fire (see 3.3)	High
• encourage investigation of habitat requirements for the maintenance or improvement of native fauna populations	Mod.
• revegetate with indigenous species in the cleared portions of the Park	Mod.
• maintain appropriate tracks for fire management access	Mod.
• establish boundary fences and maintain them in good repair	High.

2.2 Cultural Resources

No sites of archaeological or historical significance have been identified in the Park. Where sites or objects of archaeological significance are identified, they will be managed with regard to the views of Aboriginal people who have an affiliation with the area.

Actions	Priority
• liaise with Aboriginal people regarding management of sites or objects of significance found in the Park	Low

2.3 Visitors

2.3.1 Access

The maze of tracks crisscrossing the Park is resulting in degradation of the aesthetic and conservation values of the Park. In addition, many of the tracks cross back and forth between the Park and adjacent crown land or road reserves, creating access management difficulties. The track system in the Park requires urgent rationalisation, including fencing both sides of the central access track to prevent vehicles creating new tracks. Improved Park boundary fencing will also assist in controlling access into and movement through the Park. Apart from the central access track, there will be no public vehicle access within the Park. Visitors will still be able to drive along the River front on the Crown Land between the Park and the River (Figure 2).

The Park has no formal walking tracks, however the tracks traversing the Park may be used by walkers.

Figure 1 indicates public access tracks and management access tracks (which may also be used by walkers).

Actions (see Figure 2)	Priority
• maintain tracks as required for visitor and management access	High
• permit use of Park tracks for walking	Mod.

2.3.2 Camping and Recreation Activities

Recreation opportunities for public use and enjoyment of the Park will be provided which are consistent with the protection of natural features and processes, enhance appreciation and understanding of natural features, and complement recreation opportunities provided elsewhere in the region.

Moderate numbers of visitors camp on the adjacent Crown Land located along the River front. Management issues associated with camping and which impact on the Park, include protection of native fauna and flora, waste and rubbish disposal and fire risk. Dead wood, both standing and fallen, provides important habitat for Park fauna, and upon decomposing returns nutrients to the soil.

More appropriate sites for camping are available on the adjacent Crown Land and as camping is not considered compatible with conservation and rehabilitation objectives, it will not be permitted away from the river frontage.

Actions (see Figure 2)

- allow controlled camping along the river front when the crown land becomes part of the park

Priority

High

2.3.3 Interpretation and Environmental Education

Interpretation and environmental education assist in protection of natural and cultural features and are major aspects of managing public use. There is a strong community expectation that information on Parks will be readily available. The Park has a role to play in the community as a resource for environmental study and education.

Interpretation and environmental education programs will seek to assist people to use and enjoy the Park, and to understand and appreciate its features and the Service's approach to management.

Actions

- provide general information signs at appropriate locations
- incorporate the Park in the Regional interpretation plan
- provide printed information about the Park
- investigate, and if appropriate develop and provide, self-guided educational activities

Priority

High

High

Mod.

Low

2.4 Research, Inventory and Monitoring

The function of research is to assist in the understanding of resources, their use and effective management. Priorities for research are outlined throughout the Plan.

The DENR will encourage suitably accredited groups or person to apply for scientific permits to undertake non-manipulative studies of the Park's natural and cultural resources.

All research will be subject to DENR policy and procedure for the granting of scientific permits, the conduct of research and the forwarding of results to DENR. Research applications will be granted only where the research has potential to facilitate management of the natural environment, and where the effect of the research on the natural and cultural features and visitor use of the Park does not conflict with the objectives of management.

Actions

- encourage research to facilitate better management by increasing the understanding of the requirements for maintenance of plant and animal populations
- support existing research programs

Priority

Mod.
High

2.5 Staff and Management Structure

The Park is a management unit in the Murraylands Region of the DENR. A Ranger, responsible for the management of this and other parks in a defined area, is supported by other Regional management, administrative and works staff.

DENR will ensure sufficient staff and resources are provided to implement this Plan, subject to Government policy, financial constraints, and Regional priorities. DENR will also liaise with user groups, interested bodies, and adjacent landholders on matters of mutual concern.

Actions

- employ additional project staff to supplement existing staff in the implementation of this Plan, subject to Government policy, financial constraints, and Regional priorities
- liaise with the Waikerie District Council, Government instrumentalities, and adjacent landholders, regarding matters of mutual interest
- utilise volunteers and interest groups where appropriate

Priority

Mod.
High
Mod.

2.6 Additional Land

Land of conservation significance, or which would assist management of the Park will be investigated for possible acquisition and addition. The portions considered highly desirable for acquisition are part Section 388, and Sections 417 (Figure 2). These portions are all Crown Land adjacent to the River. Addition of these portions would enable much greater control of visitor access and activities on the Park while allow vehicle access and camping to still occur along the River front.

Action

- investigate adjoining land for addition to the Park
- incorporate sections 417 and part section 388 into the Park

Priority

High
High

2.7 Alien Tenure

The eastern section of Holder Lagoon has been a irrigation drainage water disposal site since 1928 for the Holder division Waikerie Irrigation Area. The site is locally known as the Ink Pot. (see figure 2) The low salinity (1600 - 2300 EC's) drainage water has created a semi permanent wetland which is surrounded by healthy floodplain vegetation.

Action

- formalise a maintenance and operating agreement with the Engineering and Water Supply Department for the Ink Pot drainage water disposal site

Priority

High

2.8 Future Management

Due to the Park's proximity to Waikerie and its variety of riparian habitats, it is an ideal location to develop an environmental resource facility. The suggested locality of such a facility is the old homestead/vineyard site located on the northern end of section 529. The types of facilities which could be developed at the site may range from a basic camping ground, managed by a local Service Club to dormitory accommodation administered by a secondary school.

The Waikerie District Council have offered to become a facilitator in developing the concept of an environmental resource facility at the Park.

Action

- in conjunction with the Waikerie District Council investigate and if appropriate lease the old homestead/vineyard site, for the development of an environmental resource facility.

Priority

Mod.

3 MANAGEMENT ACTIONS

The actions required to implement the management proposals outlined in Section 2 are summarised below. This ranking indicates the relative priority of projects and whether they are of a short term, moderate term or continuing nature.

PROJECT	PRIORITY	DURATION	PAGE
• implement pest animal and plant control programs	High	Ongoing	6
• protect habitat by controlling access and fire	High	Ongoing	6
• encourage research into habitat requirements of native fauna	Mod.	Ongoing	6
• revegetate with indigenous species	Mod.	Short	6
• maintain access tracks for fire management	Mod.	Ongoing	6
• maintain boundary fencing	High	Ongoing	6
• liaise with Aboriginal people	Mod.	Ongoing	6
• maintain tracks for visitor and management access	High	Ongoing	6
• permit use of Parks tracks for walking	Mod.	Short	6
• allow camping along the River front when the crown land becomes Park	High	Short	7
• provide information signs	High	Short	7
• incorporate the Park in the Regional interpretation plan	High	Short	7
• provide printed information about the Park	Mod.	Short	7
• if appropriate develop self-guided educational activities	Low	Short	7
• encourage research into the requirements for maintenance of plants and animal populations	Mod.	Ongoing	8
• support existing research programs	High	Ongoing	8
• employ additional project staff	Mod.	Short	8
• liaise with Councils, Government instrumentalities and adjacent land holders	High	Ongoing	8
• utilise volunteers and interest groups	Mod.	Ongoing	8
• investigate possible additions to the Park	High	Short	8
• incorporate sections 417 and part section 388 into the Park	High	Short	8
• formalise a maintenance and operating agreement with E.W.S. for the Ink Pot drainage water disposal site	High	Short	9
• in conjunction with the Waikerie District Council investigate and develop if appropriate a environmental resource facility	Mod.	Ongoing	9

MARNE VALLEY CONSERVATION PARK

1 PARK DESCRIPTION

The Murraylands area has a climate with cool winters and warm to hot summers. Diurnal and seasonal temperature variations can be significant, and because the area is in the rain-shadow of the Mount Lofty Ranges, it is considered within the southern-most extension of the arid zone in South Australia. Annual rainfall is low and irregular averaging 250mm, with a slight winter and spring predominance. Evaporation is very high during summer months, and the average monthly evaporation exceeds the rainfall in every month of the year.

Laut et al. (1977) place the Park in the Upper Murraylands Environmental Region of the Murray Mallee Province. The Park is contained within the Punthari Environmental Association, which is characterised by undulating calcrete plains with isolated dunes and incised narrow valleys. The landscape is one of open parkland with pasture understorey, and cleared cereal cropping areas. The soils of the area are deep, well drained, smooth-ped, brown earths.

The major vegetation association in the Park is a river red gum open forest, with an understorey dominated by introduced species. This community extends from beside the water courses, across the low-lying portions of the Park. The other vegetation communities present in the Park are tall open woodlands dominated by mallee box (*E. porosa*), and narrow leaved mallee (*E. foecunda*), and mallee box and white mallee (*E. dumosa*).

In the south western corner, along the eastern central boundary, and along the northern boundary the native vegetation has been largely cleared. The cleared areas are low open shrublands dominated by various exotic grasses and ephemerals and small-leaved bluebush (*Maireana brevifolia*), climbing twinleaf (*Zygophyllum eremaeum*), bassia (*Sclerolaena uniflora*), balcarra grass (*Stipa nitida*), and bladder saltbush (*Atriplex vesicaria*).

There are many felled and rolled trees throughout the Park. Much of this timber has been heaped. The surrounding land was cleared of many of its red gums before the turn of the century. There was a saw mill in the area, and the local red gum was considered superior to many other varieties for use as railway sleepers.

The River valley also formed part of the main Adelaide to Sydney stock route.

There are numerous weed species on the Park, particularly in cleared areas and along watercourses. Pest plant species of concern include yellow burrweed (*Amsinckia* spp.), California burr (*X. californicum*), African boxthorn (*Lycium ferocissimum*), dog rose (*Rosa canina*), horehound (*Marrubium vulgare*) and golden dodder (*Cuscuta campestris*).

The Park also has a significant rabbit problem, particularly on the higher ground.

Marne Valley Conservation Park lies in the tribal lands of the Ngaiawang people, on the boundary of the Nganguruku people of the lower Murray river.

2 MANAGEMENT PRESCRIPTION

Policies for the management of the Park, summarised below, have been developed within the constraints of:

- the *National Parks and Wildlife Act, 1972* and Regulations;
- State Government policy;
- National Parks and Wildlife Service policies; and
- community attitudes and expectations at State, regional and local levels.
- Department of Environmental and Natural Resources (DENR)

2.1 Natural Resources

The Park has one of the most upstream wetland remaining on the Marne River and has a sample of semi-arid vegetation communities. It provides good western grey kangaroo and waterfowl habitat (the latter particularly in wet seasons). The basis of flora and fauna management for the park is to conserve the area for maximum diversity of naturally occurring species and communities, and to control pest plant species which have invaded the Park.

The Park is not particularly susceptible to fire, except in extremely dry seasons. Fire management will be in accordance with the SANPWS Fire Management and Protection Manual (1988) and the Park Fire Protection Plan, with a general thrust that fires will be suppressed. See section 2.3.2 regarding solid fuel fires.

A pest plant management program for the Park has been developed. Pest plant infestations are recorded and monitored. Species which are to be eradicated from the Park are Dog Rose, golden dodder and Bathurst Burr.

It is proposed to revegetate the cleared portions of the Park. This will not only improve the habitat value of the Park, but will crowd out pest plant species through competition. Revegetation and pest control will also assist local River Marne catchment quality maintenance efforts by reducing surface runoff and erosion. The substantial size of the cleared portions of the Park will probably necessitate the use of direct seeding techniques in revegetation.

Modification of water regimes will also be investigated, to determine if blackfish and waterfowl habitat could be improved by manipulating water-levels and water holding times.

Animal pest species present in the Park include rabbits, cats and foxes. Control program for these species have been prepared. Rabbit control will necessitate the removal of as much of the heaped timber as possible, as this forms ideal harbour for rabbits.

The Park is fenced along its boundaries. Some sections of the boundary fences are in need of upgrading. Maintenance of boundary fences, in coordination with neighbouring property holders is a significant element in ensuring stock to not gain access to the Park.

Dogs are not permitted on the Park.

Action	Priority
• implement pest animal and plant control programs	High
• protect habitat by controlling access and fire (see 3.3)	High
• encourage investigation of habitat requirements for the maintenance or improvement of native fauna populations	Mod.
• revegetate with indigenous species in the cleared portions of the Park	Mod.
• maintain appropriate tracks for fire management access	Mod.
• maintain boundary fences in good repair	High

2.2 Cultural Resources

No sites of archaeological or historical significance have been identified in the Park. Where sites or objects of archaeological significance are identified, they will be managed with regard to the views of Aboriginal people who have an affiliation with the area.

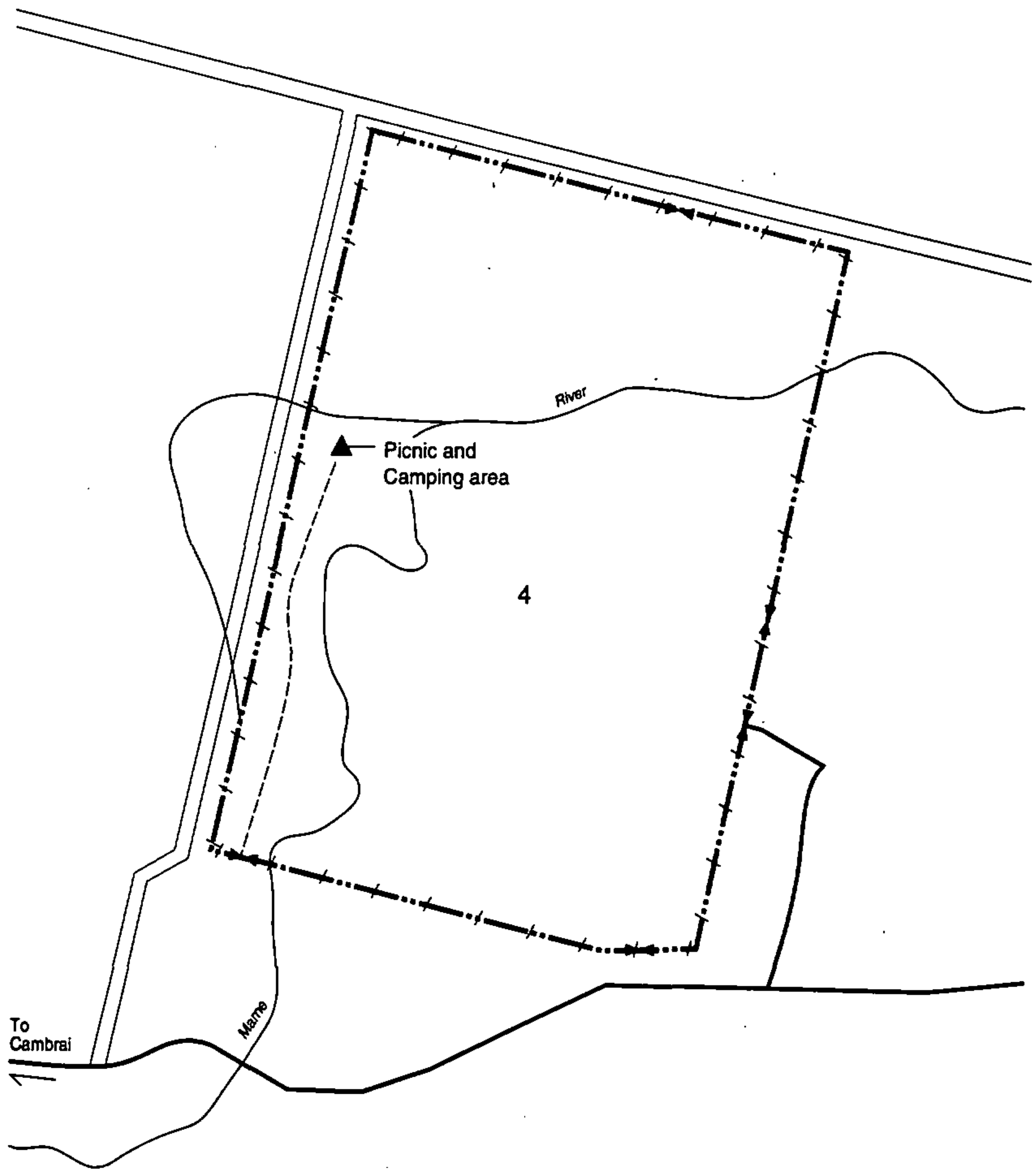
Actions	Priority
• liaise with Aboriginal people regarding management of sites or objects of significance found in the Park	Low






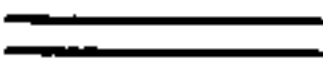
2.3 Visitors

2.3.1 Access

Visitor access within the park is mainly by foot. The Park is bounded on the north and south by public roads. Dry weather tracks run beside the western and eastern boundaries. A visitor access track runs along the western boundary from the south to the picnic and camping area. (Figure 3) A management access only track runs through the centre of the Park, from east to west, but is not a through track. There is another management access track in the cleared northern section of the Park.

The Park has no formal walking tracks, however the management are frequently used by walkers.



-  Park Boundary
-  Unsealed Road
-  Access Track
-  Fence
-  Gate
-  Road Reserve



0 1 km



Figure 3
Marne Valley Conservation Park
Features and Concepts

Figure 3 indicates public access tracks, and management access tracks.

Actions (see Figure 3)	Priority
• maintain tracks as required for visitor and management access	High
• provide and maintain signposted walking tracks in the Park	Mod.

2.3.2 Camping and Recreation Activities

Recreation opportunities for public use and enjoyment of the Park will be provided which are consistent with the protection of natural features and processes, which enhance appreciation and understanding of natural features, and which complement recreation opportunities provided elsewhere in the region. Camping sites will be designated at appropriate locations in the Park. Wood use will be managed to ensure conservation objectives are met

Few visitors to the Park camp during their visit. However, small numbers of visitors do wish to camp in the Park. Camping will be provided for in the south western portion of the Park. Visitors tend to use the Park for bird watching and botanising, or are visiting in transit to another destination. Management issues associated with camping include protection of the native fauna and flora, and fire risk. Dead wood, both standing and fallen, provides important habitat for Park fauna, and upon decomposing returns nutrients to the soil. The removal of timber can have substantial long term impacts on the fauna and flora of a Park. However, in Marne Valley Conservation Park there is an excess of fallen timber as the result of human activity, and it is not anticipated that moderate camp-fire use will prove a problem in the near future.

Management efforts to mitigate impacts of camping will focus on educating visitors about the Park, its features and values, management objectives and appropriate behaviour (see Section 3.3.3).

Actions (see Figure 3)	Priority
• camping on the Park will be restricted to one designated area	High
• use of solid fuel fires will be monitored	Mod.

2.3.3 Interpretation and Environmental Education

Interpretation and environmental education assist in protection of natural and cultural features and are major aspects of managing public use. There is a strong community expectation that information on Parks will be readily available. The Park has a role to play in the community as a resource for environmental study and education.

Interpretation and environmental education programs will seek to assist people to use and enjoy the Park, and to understand and appreciate its features and the Service's approach to management.

Actions	Priority
• provide general information signs at appropriate locations	High
• incorporate the Park in the Regional interpretation plan	Mod.
• provide printed information about the Park	Mod.
• investigate, and if appropriate develop and provide, or self-guided educational activities	Low

2.4 Research, Inventory and Monitoring

The function of research is to assist in the understanding of resources, their use and effective management. Priorities for research are outlined throughout the Plan.

The DENR will encourage suitably accredited groups or person to apply for scientific permits to undertake non-manipulative studies of the Park's natural and cultural resources.

All research will be subject to DENR policy and procedure for the granting of scientific permits, the conduct of research and the forwarding of results to the DENR. Research applications will be granted only where the research has potential to facilitate management of the natural environment, and where the effect of the research on the natural and cultural features and visitor use of the Park does not conflict with the objectives of management

Actions	Priority
• encourage research which can facilitate better management by increasing the understanding of the requirements for the maintenance of threatened populations of plants and animals	High
• support existing research programs	High

2.5 Staffing and Management Structure

The Park is a management unit in the Murraylands Region of the DENR. A Ranger, responsible for the management of this and other parks in a defined area, is supported by other Regional management, administrative and works staff.

DENR will ensure sufficient staff and resources are provided to implement this Plan, subject to Government policy, financial constraints, and Regional priorities. DENR will also liaise with user groups, interested bodies, and adjacent landholders on matters of mutual concern.

Actions

- employ additional project staff to supplement existing staff in the implementation of this Plan, subject to Government policy, financial constraints, and Regional priorities
- liaise with the Marne District Council, Government instrumentalities, and adjacent landholders, regarding matters of mutual interest
- utilise volunteers and interest groups where appropriate

Priority

Mod.

High

High

2.6 Additional Land

Land of conservation significance, or which would assist management of the Park will be investigated for possible acquisition and addition. The portions considered desirable for acquisition are part section 162, along and including the western boundary track, and the portion of land between the Park and the eastern access track, as far north as the turn-off into the Park (Figure 3). These acquisitions would add areas of conservation significance to the Park, and would simplify Park management.

Action

- investigate adjoining land for addition to the Park

Priority

High

3 MANAGEMENT ACTIONS

The actions required to implement the management proposals outlined in Section 2 are summarised below. This ranking indicates the relative priority of projects and whether they are of a short term, moderate term or continuing nature.

PROJECT	PRIORITY	DURATION	PAGE
• implement pest animal and plant control programs	High	Ongoing	13
• protect habitat by controlling access and fire	High	Ongoing	13
• encourage research into habitat requirements of native fauna	Mod.	Ongoing	13
• revegetate with indigenous species	Mod.	Ongoing	13
• maintain fire management access tracks	High	Ongoing	13
• maintain boundary fencing	High	Ongoing	13
• liaise with Aboriginal people	Mod.	Ongoing	13
• maintain tracks for visitor and management access	High	Ongoing	14
• provide sign-posted walking tracks	Mod.	Short	14
• allow camping in designated areas	High	Ongoing	14
• monitor sold fuel fire use	Mod.	Ongoing	14
• provide information signs	High	Short	15
• incorporate the Park in the Regional interpretation plan	Mod.	Short	15
• provide printed information about the Park	Mod.	Short	15
• if appropriate develop self-guided educational activities	Low	Short	15
• encourage research into the requirements for maintenance of plants and animal populations	High	Ongoing	15
• support existing research programs	High	Ongoing	15
• employ additional project staff	Mod.	Short	16
• liaise with Councils, Government instrumentalities and adjacent landholders	High	Ongoing	16
• utilise volunteers and interest groups	High	Ongoing	16
• investigate possible additions to the Park	High	Short	16

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