Lake Newland Conservation Park Management Plan

Western Eyre Peninsula







Our Parks, Our Heritage, Our Legacy

Cultural richness and diversity are the marks of a great society. It is these qualities that are basic to our humanity. They are the foundation of our value systems and drive our quest for purpose and contentment.

Cultural richness embodies morality, spiritual well-being, the rule of law, reverence for life, human achievement, creativity and talent, options for choice, a sense of belonging, personal worth and an acceptance of responsibility for the future.

Biological richness and diversity are, in turn, important to cultural richness and communities of people. When a community ceases to value and protect its natural landscapes, it erodes the richness and wholeness of its cultural foundation

In South Australia, we are privileged to have a network of parks, reserves and protected areas that continue to serve as benchmarks against which we can measure progress and change brought about by our society. They are storehouses of nature's rich diversity, standing as precious biological and cultural treasures. It is important to realise that survival of species in 'island' reserves surrounded by agriculture or urban areas is uncertain, and that habitat links between reserves are essential for their long-term value as storehouses.

As a result of more than a century of conserving nature and cultural items, we possess a "legacy" which is worth passing on to future generations.

There are twelve essentials for the protection of our park environments:

- Recognition that a primary purpose of our national parks system is to conserve the wide diversity of South
 Australia's native plants and animals and to improve their chances of survival through active wildlife
 management.
- Recognition that all our parks also protect cultural legacy of relevance to both Indigenous and Nonindigenous people, and that Indigenous people have had cultural association with this land over many thousands of years.
- Freedom to improve our legacy by making additions to the park system -- enhancing existing protected areas and including landscapes and environments containing native plant and animal communities not already protected.
- Realisation that the continuance of our native species cannot be dependent upon island reserves alone but should be provided for in a regional landscape with linkages between natural areas to enhance the prospect of long-term survival.
- Recognition that there is potential for new and useful substances or genetic material to be found in native plant and animals.
- Recognition of economic and social benefits for local communities, which arise from the presence of national parks in their region and the consequent opportunities to offer service for visitors.
- Development of close relationships with the community, so that there is an understanding of the role of parks in conserving native wildlife, cultural items and in providing recreational opportunities.
- Promotion of community participation in making decisions on the management of parks, so that a sense of
 community ownership of the reserve system may be fostered, and so that parks and surrounding landscapes
 are managed in harmony.
- Appreciation that those qualities presented to visitors for their use and enjoyment in parks, should be the diversity of plants, animals and landscapes for which the parks were set aside.
- Understanding that development in a park should proceed where it:
 - contributes to the conservation of the environment;
 - provides for better appreciation of the need to conserve the diversity of plants and animals;
 - protects wildlife habitats and landscape (especially Vulnerable and threatened species or communities); and
 - is necessary for management of the park.
- Reassurance, in support of our cultural character, that natural areas can survive even though those who care deeply for their survival may never visit them.
- Provision of valued natural areas for people to be at one with nature and for personal and spiritual refreshment.

LAKE NEWLAND CONSERVATION PARK MANAGEMENT PLAN

Western Eyre Peninsula

South Australia

May 2003

Department for Environment and Heritage



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FOREWORD

This management plan sets out objectives and actions for the Lake Newland Conservation Park. It has been produced in accordance with the *National Parks and Wildlife Act, 1972*. The park is of considerable conservation value and is managed by the Department for Environment and Heritage.

Located on the west coast of Eyre Peninsula, Lake Newland Conservation Park is noted for its size, remote location and diversity of habitats. Of these habitats, the wetlands are recognised as some of the most significant on Eyre Peninsula, and are considered to be internationally important habitat for Banded Stilts, whilst the coastline provides important habitat for the state vulnerable Hooded Plover. Additionally, the park contains significant stands of Sheoak woodland, which was once widespread in this part of Eyre Peninsula but is now uncommon due to the effects of grazing by sheep and rabbits.

The park is mainly used by locals and visitors for recreational fishing and beach activities, whilst a limited number of bird watchers use the edges of the lagoons and associated fresh water springs and seepages to observe birds. The District Council of Elliston is now actively promoting the area and visitor numbers can be expected to increase.

Management aims to conserve wetlands, remnant vegetation and associated wildlife within the park whilst providing opportunities for suitable recreational activities. DEH intends to develop substantial working relationships with government agencies, local authorities and local communities to assist with the management of this valuable resource.

The management objectives for Lake Newland 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 Lake Newland Conservation Park is managed in a regional context.

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

JOHN HILL

MINISTER FOR ENVIRONMENT AND CONSERVATION



SYNOPSIS

This plan describes the natural qualities of Lake Newland Conservation Park and suggests how they might be conserved and managed to retain their significant features. It also defines opportunities for visitors to enjoy the park and how these may be developed in a manner that can be sustained by the park environment. Proposed actions to implement management objectives are summarised at the end of the plan.

Lake Newland Conservation Park is located on the west coast of Eyre Peninsula, approximately 20 kilometres north of Elliston. It was first constituted as a park in 1985 and is currently managed by staff based at Coffin Bay National Park, some 175 km to the south.

The park protects very significant wetlands, which are considered to be of international importance for Banded Stilts and of importance as summer feeding habitat for the state vulnerable Hooded Plover. It shares the distinction, along with Big Swamp between Port Lincoln and Coffin Bay, of being one of the most important wetlands on Eyre Peninsula for the presence of bird species considered vulnerable at the State level and for its important role as a drought refuge.

The attractions of the park include its remoteness, its size and the diversity and integrity of its landforms. The diversity of habitats in the park supports a wide range of birds and other fauna of conservation significance.

The park receives relatively few visitors, but is popular with local people. There are no visitor facilities in the park managed by the Department for Environment and Heritage (DEH), although the District Council of Elliston have established basic facilities at Walkers Rock where conventional vehicles may access the southern edge of the park. Access to the rest of the park is difficult, and suitable for 4WD and foot traffic only. The beach at Walkers Rock is popular in summer for recreational fishing and family activities.

The park protects a series of shallow saline lakes with fresh water springs, soaks, and seepages. This wetland provides essential habitat for a wide range of waders and other water birds. Groundwater from the Bridgewater Formation aquifer flows into the wetland through a series of fresh water springs, soaks and seepages. Maintaining the integrity and flow of these fresh water sources is essential for the wildlife of the park. The wetland includes extensive samphire flats, fringed with paperbark shrublands. Remote beaches are backed by an extensive coastal dune system containing both vegetated and mobile dunes.

The majority of vegetation in the park is slow growing coastal heath and low scrubby woodland. Open Swamp Paperbark (*Melaleuca halmaturorum*) scrub with semi-succulent shrubs, is also prominent around the lakes. Remnants of Coastal Sheoak (*Allocasuarina verticillata*) woodland, which was once widespread on Eyre Peninsula, occur on the western verges of the lakes.

The park protects evidence of Aboriginal occupation and may protect sites of cultural significance.

Key Values

- The range of wetlands, fresh water springs, soaks and seepages and the associated wildlife species dependent on this system which have international, national and state significance.
- The range of waders, shorebirds and other waterbirds.
- The presence of animal species of conservation significance.
- The coastal dune system and its vegetation, particularly the remnant sheoak woodlands.
- The remoteness of the area and limited access to major sections of the park.
- The beach at Walkers Rock, popular for swimming and other family beach activities.
- Remote beaches prized for their recreational fishing opportunities.

Key Management Actions

- Maintain the volume and integrity of the groundwater available for the fresh water springs on which the wildlife species, particularly waterbirds, depend.
- Protect the geological features, particularly the freshwater springs and seepage systems and the saline lakes.
- Protect the wildlife, particularly waders and other wetland birds in the wetland habitats.
- Protect the coastal dune system by rationalising vehicle access, monitoring the drift of mobile dunes and rehabilitating where necessary.
- Provide appropriate visitor access and facilities in the park.
- Provide information and interpretation material about the landscape, wildlife and, where appropriate, the sites of cultural importance.
- Work in partnership with the community to conserve the park values.

TABLE OF CONTENTS

FOREWORD	
SYNOPSIS	i
1 INTRODUCTION	1
2 MANAGEMENT FRAMEWORK	
2.1 Park Classification	
2.2 Government Policy and legislation	
2.3 Native Title	
2.3.1 Land Tenure History	
2.4 Environment Protection and Biodiversity Conservation Act 1999	
3 MANAGEMENT CONTEXT	
3.1 Purpose of Reserve	
3.2 Location and Park Features.	
3.2.1 Climate	
3.3 Regional Setting	7
3.4 History of Reserve Management	10
3.5 Existing Management Arrangements	10
3.6 Management Philosophy & Strategic Directions	10
4 MANAGEMENT PRESCRIPTION	12
4.1 Zoning	12
4.2 Natural Resources	12
4.2.1 Geology and Landform	12
4.2.2 Soils	14
4.2.3 Hydrology	
4.2.4 Native Vegetation	
4.2.5 Native Fauna	
4.2.6 Research and Research Management Systems	
4.2.7 Introduced Plants	
4.2.8 Introduced Animals	
4.3 Cultural Heritage	
4.3.1 Aboriginal Heritage	
4.3.2 Colonial Heritage	
4.5 Recreation and Tourism	
4.5.1 Visitor Use	
4.5.2 Vehicle Access	
4.5.3 Walking Trails	
4.5.4 Camping and Day Visit Areas.	30
4.5.5 Visitor Information and Interpretation	
4.6 Commercial Activities	
4.6.1 Mining Leases	
4.7 Management Arrangements	
4.7.1 Partnerships and Cooperative Management	34
4.8 Future Directions	35
4.8.1 Additional Land	35
5 SUMMARY OF MANAGEMENT ACTIONS	36
6 REFERENCES AND BIBLIOGRAPHY	
APPENDIX A: Legislation, Conventions and Agreements	
APPENDIX B: Land Tenure history	
ALLENDIA D. LANG IGNUIC HISWLY	44

LIST OF FIGURES

Figure 1: Location	8
Figure 2: Zoning	13
Figure 3: Park Features	31

ABBREVIATIONS AND GLOSSARY OF TERMS

Calcarenite: Limestone particles of sand size, derived from the breakdown of marine shells.

Calcrete: Rock formed from limestone cementation.

DEHAA: Department of Environment, Heritage and Aboriginal Affairs

DEH: Department for Environment and Heritage

DME: Department of Mines and Energy (now PIRSA)

DOSSA Department of State Aboriginal Affairs

EPCWMB Eyre Peninsula Catchment Water Management Board

GIS Geographic Information System ILUA: Indigenous land use agreement PIRSA: Primary Industry Resources SA,

NP&W Act: National Parks and Wildlife Act 1972

CFS: Country Fire Service

PAMS: Protected Area Management System (a computer database)

PIRSA: Primary Industry Resources South Australia SAOA: South Australian Ornithological Association

SEG: Scientific Expedition Group

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1 INTRODUCTION

This management plan has been prepared in accordance with the *National Parks and Wildlife Act* 1972. It is the management plan for Lake Newland Conservation Park. This reserve is located on the west coast of Eyre Peninsula, which falls within the West Region of the Department for Environment and Heritage. The plan outlines proposals to effectively conserve the natural and cultural values of the parks, while providing for public use and enjoyment.

Section 38 of the Act states that a management plan is required for each reserve. A management plan should set forth proposals in relation to the management and improvement of the reserve and the methods by which it is intended to accomplish the objectives of the Act in relation to that reserve.

Upon completion of a draft plan an announcement is made in the Government *Gazette* and the plan is placed on public exhibition for three months. During this period, any interested person may make submissions which are then referred, with the plan, to the South Australian National Parks and Wildlife Council for their comments and suggestions. Submissions must be in writing; e-mail submissions are acceptable.

Having formal community input into public land management is a legislative requirement and is supported by park managers. The draft plan for Lake Newland Conservation Park was released for public exhibition in October 2001. At the close of the three month comment period, 12 submissions had been received. Issues raised in submissions included the provision of access to fishing spots on the beach adjacent to the park and additions to species lists. All concerns were considered by the Eyre Consultative Committee before going to the SA National Parks and Wildlife Council.

The Minister, after considering all representations, may then adopt the management plan with or without alterations. In the case of this plan for Lake Newland Conservation Park, a number of alterations have been incorporated as a result of the community consultation process. Notice of official adoption is published in the Government *Gazette* and copies of the final plan are made available for sale to the public. They may also be viewed on the departmental website http://www.environment.sa.gov.au/parks/management plans.html.

Once a plan of management is adopted, its provisions must be carried out in relation to the reserve in question and no actions undertaken unless they are in accordance with the plan. However, the Act does make provision for amending adopted plans and this process is similar to the one described above.

2 MANAGEMENT FRAMEWORK

Management planning is a statutory requirement for all reserves prescribed in S38 of the *National Parks and Wildlife Act 1972* and S31 of the *Wilderness Protection Act 1992*. The management planning process is but a small part of a much larger, state-wide hierarchy of management. This is directed from the highest level by state government policies and departmental priorities and implemented, on a day to day basis, at a regional and district level.

Management plans are significant, in that they provide a ministerially endorsed and legally binding framework for the use and management of *National Parks and Wildlife Act* reserves. They are intended to accommodate anticipated trends and community aspirations over a five to ten year time frame. The legislation anticipates that management plans will be formally reviewed from time to time, but there are no prescribed time limits for this to occur.

DEH regional staff have been assigned primary responsibility for preparing management plans and undertaking the associated community consultation process. A standard management planning process is mandated, to ensure that all statutory obligations are met.

Management plans define what is considered acceptable activity in a reserve while still allowing park managers some flexibility in day to day decision-making. They should be proscriptive enough to prevent deleterious activities, or inappropriate developments, taking place. They are not intended to be comprehensive compendiums of resource information, nor are they heavily prescriptive action statements; other documentation covers those aspects. They do however, identify the key values of reserves, the appropriate utilisation and the major issues of concern requiring action, thereby providing the community (and park managers) with a blue-print of how public land is going to be used and managed.

It will be noted that management plans often foreshadow the preparation of 'delegate' plans to achieve the proposed objectives. For example, a bushfire prevention plan and a visitor facilities plan might both be needed to provide additional details on how the actions, listed in this management plan, are to be progressed. Although such in-house action plans are not subject to the same statutory processes as are formal management plans, DEH will continue to involve relevant stakeholders, other agencies and community groups in their preparation and implementation as part of the on-going management of the park.

Each year park managers, taking regional and district priorities into account, draw up work programs to implement some of the actions proposed in management plans. Whether these projects are actually undertaken is determined by, and subject to, the availability of resources (eg staffing and funding) and to any requirements of the Minister for Environment and Conservation and the department's Chief Executive, who take a state-wide overview in setting departmental priorities and allocating resources.

2.1 Park Classification

Parks have been established over the past century for a variety of reasons, ranging from the conservation of biodiversity and cultural heritage to multiple use areas which include the environmentally responsible use of our natural resources. The classification of parks provides a general statement of purpose for which the area was acquired.

Classifications under the *National Parks and Wildlife Act 1972*, the *Crown Lands Act 1929* or the *Wilderness Protection Act 1992* are as follows:

Recreation Parks (RP) - areas of significance under the National Parks and Wildlife Act, managed for public recreation and enjoyment in a natural setting;

National Parks (NP) - areas proclaimed under the National Parks and Wildlife Act considered to be of national significance due to wildlife, natural features of the land or cultural heritage;

Conservation Parks (CP) - areas under the National Parks and Wildlife Act that are protected for the purpose of conserving wildlife or the natural or historic features of the land, where the development of visitor facilities tends to be kept to a minimum;

Game Reserves (GR) - areas set aside under the National Parks and Wildlife Act for the conservation of wildlife and the management of game at prescribed times for controlled seasonal hunting;

Regional Reserves (RR) - areas proclaimed under the National Parks and Wildlife Act for the purpose of conserving wildlife or natural or historical features while allowing responsible use of the area's natural resources (ie. mining);

Conservation Reserves (CR) - land currently set aside for conservation of natural and cultural features under the Crown Lands Act 1929 and held under the care, control and management of the Minister for Environment and Conservation, that for various reasons were not proclaimed under the National Parks and Wildlife Act, 1972; and

Wilderness Protection Areas (WPA) - land set aside under the Wilderness Protection Act 1992 to protect natural and remote areas.

2.2 Government Policy and legislation

When managing reserves, DEH is required under section 37 of the *National Parks and Wildlife Act* to have regard to, and provide actions that are consistent with the following objectives stated in the Act:

- 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 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.

In addition to the *National Parks and Wildlife Act*, DEH is obliged to comply with the provisions of a wide variety of legislation, conventions and agreements, which are shown in Appendix A.

2.3 Native Title

Native Title is used to describe the interests Aboriginal and Torres Strait Islander People have in land and waters according to their traditional laws and customs. Federal legislation, in the form of the *Native Title Act 1993*, was enacted to:

- provide for the recognition and protection of native title;
- establish ways in which future dealings affecting native title may proceed and to set standards for those dealings;
- establish a mechanism for determining claims to native title; and
- provide for, or permit, the validation of past acts, and intermediate period acts, invalidated because of the existence of native title.

Any development proposed for a reserve must be valid in terms of the *Native Title Act 1993*.

This reserve is subject to a claim for a determination of native title by the Wirangu People (native title claim SC97/006 Wirangu #2). A 'determination' is a decision made by the courts as to who holds native title for an area.

This management plan is released and has been adopted subject to any native title rights and interests that may continue in relation to the land and/or waters. Nothing in the management plan is intended to affect native title. Before undertaking any future acts that might affect native title, DEH will follow the relevant provisions of the *Native Title Act 1993*.

However, in addition to the requirements of native title legislation, DEH is committed to developing partnerships with Aboriginal people. This may include a number of native title and Aboriginal heritage groups.

Consistent with South Australian Government policy, DEH is also keen to pursue Indigenous Land Use Agreements (ILUAs) where appropriate. ILUAs are voluntary agreements between a native title group and other people about the use and management of land and/or waters.

2.3.1 Land Tenure History

The land tenure history identifies the prior tenure for each land parcel now reserved, as well as detailing reserve proclamations. The land tenure history determines whether native title has been extinguished or whether it may still exist on a parcel of land.

Lake Newland Conservation Park comprises land within the Hundred of Colton (proclaimed in 1876) and Hundred of Downer (proclaimed in 1883). The history of land tenure in the area indicates that, while much of the land now comprising the park has remained Crown land, some areas were assigned as perpetual leasehold. In 1988, perpetual leasehold sections 54, 155, 207 and 208, Hundred of Colton, were purchased from the leaseholder (Mr. Watkins) for conservation purposes. Other sections in the original Lake Newland Conservation Park dedication were Crown land.

The park was first proclaimed by Government *Gazette* in 1991 to comprise Allotment 10 of DP 29068 and Sections 54, 155, 201, 202, 203, 207, 208, and 212 Hundred of Colton, County of Musgrave and Section 287, Hundred of Downer, County of Robinson. The park is proclaimed under section 43 of the *NP&W Act* to provide rights of entry for prospecting, mineral exploration and mining tenements pursuant to the *Mining Act 1971*, and subject to the approval of the Minister for Environment and Conservation.

Specifics of the land tenure history, relating to native title, for land parcels comprising this reserve are provided in Appendix B.

2.4 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) represents a fundamental reform of former Commonwealth environment laws. The Act establishes a new Commonwealth approval process for assessment of proposed actions that are likely to have a significant impact on matters of national environmental significance and provides an integrated system for biodiversity conservation and management of important protected areas.

Matters that require assessment and approval of proposed actions under the EPBC Act 1999 are:

- any action that has, will have or is likely to have a significant impact on the following identified matters of national environmental significance:
 - World Heritage properties
 - Ramsar wetlands of international significance
 - Nationally listed threatened species and ecological communities
- Listed migratory species
- Commonwealth marine areas
- Nuclear actions (including uranium mining)
- any activity involving Commonwealth land that has, will have, or is likely to have a significant impact on the environment.

With regard to Lake Newland Conservation Park one nationally threatened species occurs within the park, the *vulnerable* Blue Petrel (*Halobaena caerulea*). Commonwealth approval is required for any action that has, will have or is likely to have a significant impact on nationally threatened species in addition to any State approval that may be required.

Furthermore, in consultation with relevant State authorities, the Commonwealth Minister for the Environment and Heritage may develop and implement recovery plans and threat abatement plans for threatened species and ecological communities listed under the EPBC Act. Where applicable, DEH should contribute to and incorporate these plans into park management regimes and operational procedures.

3 MANAGEMENT CONTEXT

3.1 Purpose of Reserve

Lake Newland wetlands were considered to have exceptional conservation value by Lloyd (1986) by virtue of the high diversity of flora and the fauna in the area's saline ecosystem. In addition, the area has remained relatively free from the major impacts of land use and from resource use activities such as fishing. It shares the distinction, along with Big Swamp between Port Lincoln and Coffin Bay, of being one of the most important wetlands on Eyre Peninsula for its conservation value.

Buckley and Fotheringham, in a survey of the Eyre Peninsula coast for the Coastal Protection Board in 1987, identified the Lake Newland region as a priority area for conservation management. The reasons given were "because of its size, diversity of landform, inaccessibility, and ability to complement Talia Caves on northern boundary and Walkers Rock on southern boundary." The report indicated however, that the area still showed evidence of the decline of sheoak woodland along the west coast of Eyre Peninsula, attributed to intense grazing by sheep and rabbits.

The Nature Conservation Society of South Australia lobbied for the dedication of the park over a number of years, based on these reports and the area's obvious conservation significance.

As a result, Lake Newland Conservation Park was proclaimed in 1991. Briefing papers to Cabinet at the time outlined the reasons for dedication as being to "conserve significant wetlands and dune systems on the west coast of Eyre Peninsula." The park was described in the Cabinet briefing as a "series of spring fed lakes (salt) separated from Anxious Bay by an extensive dunal system extending to the beach. The lakes extend into a samphire and tea tree community around the fringes with cleared grassland further inland."

A further 406 ha, Allotment 10 of Deposited Plan 40280, Hundred of Colton, along the southern edge of the park adjacent to Walkers Rock, was proclaimed in 1996 to extend the wildlife habitat, to rationalise the reserve boundary and to assist with the management of public access to Walkers Rock.

IUCN Classification

Lake Newland Conservation Park is recognised as an IUCN category Ia 'Strict Nature Reserve', an area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

Management of Lake Newland Conservation Park will be consistent with the following IUCN Category Ia objectives of management;

- to preserve habitats, ecosystems and species in as undisturbed a state as possible;
- to maintain genetic resources in a dynamic and evolutionary state;
- to maintain established ecological processes;
- to safeguard structural landscape features or rock exposures;
- to secure examples of the natural environment for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded;
- to minimise disturbance by careful planning and execution of research and other approved activities; and
- to limit public access.

3.2 Location and Park Features

Lake Newland Conservation Park is a coastal park of some 8,912 ha that runs almost north-south along the coast for about 25 km. Extensive coastal dunes are backed by a series of shallow saline lakes, fresh water springs, soaks and seepages, that provide suitable habitat for a wide range of waders, shorebirds and other water birds.

Several reefs and rocky stretches extend along the beach in places. Inland from the coastal dunes, a series of saline lakes occur, with occasional fresh water springs and seepages along their edges. Samphire flats and paperbark shrublands abut the lake edges. To the east there is a strip of land that

was previously cleared and used for grazing prior to its dedication as a park. Sheoak woodlands probably covered much of this cleared land and some of the back dunes prior to closer settlement.

Vehicle access to the park is limited. Access to the beach by conventional vehicles is only possible at the southern edge near Walkers Rock. All other beach access is by 4WD. A single lane, all weather track called Sheridans Lane leads to the eastern edge of the saline lake system from the Flinders Highway.

3.2.1 Climate

Lake Newland Conservation Park has a Mediterranean climate. The majority of rain falls in winter as a result of westward-moving low pressure systems, which migrate further to the south during summer. For Elliston (approximately 20 km south of the park), the Bureau of Meteorology records an average annual rainfall of 427.6 mm, of which only 38.9 mm falls in summer. Mean daily temperatures at Elliston are 25.4°C maximum / 15.5°C minimum for January, and 16.3°C maximum / 7.8°C minimum for July. Winter winds are predominantly from the west / north-west while summer winds are predominantly from the south-east.

3.3 Regional Setting

Department for Environment and Heritage

Lake Newland Conservation Park is in the West Region of DEH, is one of 55 parks in the Eyre District, and is managed by staff based in Coffin Bay National Park, approximately 175 km to the south. Other DEH reserves in the vicinity include Venus Bay Conservation Park, Kulliparu Conservation Park and Reserve, Cocata Conservation Park and Reserve, Bascombe Well Conservation Park and Reserve and Barwell Conservation Park and Reserve.

National Reserve System

Lake Newland Conservation Park forms part of the National Reserve System (NRS), which encompasses all existing protected areas managed and/or administered by State or Commonwealth nature conservation agencies.

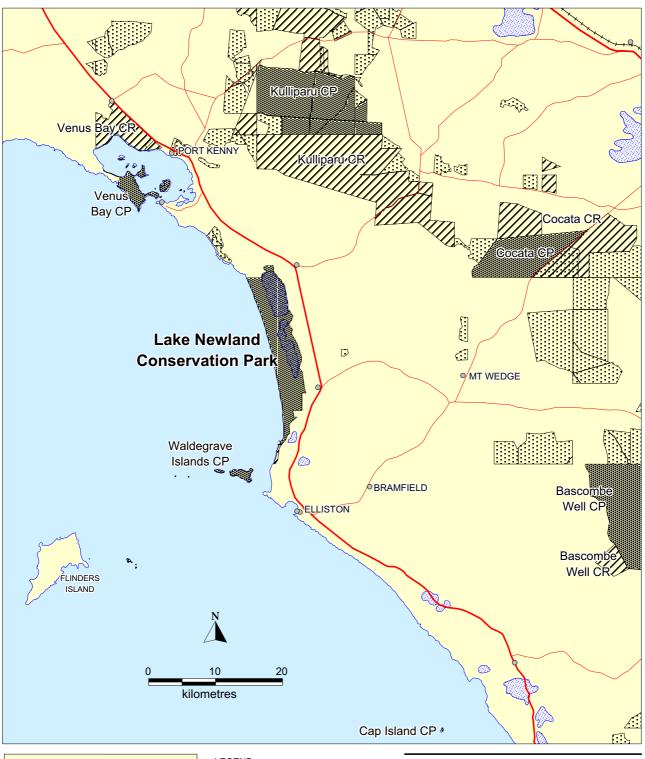
The aim of the National Reserve System is to establish a Comprehensive, Adequate and Representative Reserve System (CARRS) for the protection of Australia's biodiversity according to the following principles;

- Comprehensiveness; inclusion of the full range of ecosystems recognised at an appropriate scale within and across each bioregion.
- Adequacy; ability to maintain the ecological viability and integrity of populations, species and communities.
- Representativeness; those areas that are selected for inclusion in reserves reasonably reflect the biotic diversity of the ecosystems from which they derive.

Biogeographic Regionalisation and Environmental Associations

The Interim Biogeographic Regionalisation of Australia (IBRA) provides a bioregional planning framework within which to identify the gaps and to set priorities for developing the National Reserve System. IBRA regions represent a landscape based approach to classifying the land surface from a range of continental data on environmental attributes. In 1999, IBRA version 5.1 was developed with 85 bioregions delineated, each reflecting a unifying set of major environmental influences which shape the occurrence of flora and fauna and their interaction with the physical environment.

Lake Newland Conservation Park lies within the Eyre and Yorke Block IBRA region which is described as 'Archaean basement rocks and Proterozoic sandstones overlain by undulating to occasionally hilly calcarenite and calcrete plains and areas of aeolian quartz sands, with mallee woodlands, shrublands and heaths on calcareous earths, duplex soils and calcareous to shallow sands, now largely cleared for agriculture' (Environment Australia 2002).





LEGEND

Conservation Parks
Conservation Reserves

Heritage Agreements (Privately Owned)

Figure 1

Lake Newland Conservation Park Location





Within the Eyre and Yorke Block IBRA region, Laut *et al* (1977) recognised a series of Environmental Associations. The Environmental Associations (EA) incorporating the park are:

- <u>Polda</u>: Extensive plain on calcreted sand with isolated hills and coastal dunes, lakes and lagoons. Vegetation is generally open parkland with sown pastures. Only 116 ha of this association is found within Lake Newland Conservation Park.
- <u>Newland</u>: High mobile dunes, swampy depressions and consolidated dunes. Vegetation is generally heath, sown pastures and cereal crops. Most of Lake Newland Conservation Park (7655 ha) is within this environmental association.

The contribution of Lake Newland Conservation Park to the National Reserves System is important due to the fragmented distribution of protected areas and the poor representation of many environmental associations within Government reserves.

Regional Biodiversity Conservation

On-park biodiversity conservation should integrate with broader regional programs. In order to do this DEH has developed the *Biodiversity Plan for Eyre Peninsula, South Australia*. This plan is a guide for the community and government on the biodiversity assets of the region, major threats and recommendations on priority management strategies for conservation. It provides information on the priority areas, vegetation types and species of the region, and strategic actions to assist in maintaining biodiversity for the future.

Conservation programs in the park will be coordinated with the "Ark on Eyre" program aimed at restoring, where practical, habitats and species that were prevalent before Colonial settlement and which are now either absent or greatly diminished in the region

Adjacent to Lake Newland Conservation Park, there are several private properties protected by Heritage Agreements under the *Native Vegetation Act 1991*, that assist with the preservation of biodiversity within the region. These protected areas provide stepping stones or links that assist with increased movement of species, improved genetic diversity and ecosystem sustainability.

Tourism

Lake Newland is one of a number of attractive coastal areas along the length of the west coast of Eyre Peninsula. A recurring combination of limestone cliffs and rocky headlands is intermixed with sand dunes and sandy beaches. It provides an opportunity for travellers along the west coast of Eyre Peninsula to deviate to the coastline for spectacular scenery and high quality recreation on their journey.

The coastline is relatively remote and provides visitors with an opportunity to experience the special, and increasingly rare, qualities of a coastal wilderness. Large farming and grazing properties neighbour the park.

The southern boundary of the park at Walkers Rock is approximately 20 km north of the regional town of Elliston. Caravan parks and other accommodation are within easy travel of the park, and the scenic and recreational opportunities provided by the coastline in the region are actively promoted by the District Council of Elliston. The DC of Elliston is interested in the management of Lake Newland Conservation Park for the potential tourism opportunities that it provides to the region. The park conserves 25 km of the 150 km long coastline that falls within the council area. The council prepared a Development Plan Amendment Report in 1995 which identified the importance of the coastal zone. A number of roads to popular tourist localities including Walkers Rock, Lake Newland and Talia Caves feature in the Council's Coastal Management Plan.

Eyre Peninsula Development Board figures indicate that there were 303,000 visitors to Eyre Peninsula in 1995 and figures from the SA Tourism Commission "Eyre Peninsula Profiles" (1996) indicate that 9% (or approximately 27,000) of those visitors stop at Elliston per year. At the moment (1999), it is thought that few of these visitors venture into the park. However, visitor numbers may be expected to increase if the DC of Elliston and local tourist operators are successful in promoting the town and nearby sites as tourist destinations, rather than sites only to visit in passing.

3.4 History of Reserve Management

The park is a relatively new addition to the State's reserved estate with very low visitation. Parts of the park have been under the care of DEH staff since the late 1980s, but active management of the area was a low priority during this time. However, a program of Boxthorn control, as part of a good neighbour contribution to the district eradication program, has been undertaken. Prior to dedication, control of vermin and weeds in the park had been no greater than that in the surrounding district.

Some experimental plantings of Sheoak tubestock seedlings were established on limestone plains in sections of the park along the eastern boundary, but Rabbit grazing and dry conditions reduced the number of survivors markedly. Photopoints for monitoring regeneration have been established in these areas.

A fire access track exists along portions of the eastern boundary.

The park had no facilities for visitors when it was dedicated in 1991, and none have yet been developed by DEH. The DC of Elliston is promoting the scenic features of the park to tourists and has established day visit and camping facilities at Walkers Rock.

3.5 Existing Management Arrangements

There is currently no Friends Group formed specifically for the park. The Streaky Bay & Districts Friends of Parks Group or the Friends of Southern Eyre Peninsula Parks may be encouraged to extend their services to the park, or a new group may develop.

The District Council of Elliston, however, is keen to stimulate tourism interest in the region and to this end, has contributed to visitor facilities at Walkers Rock, in collaboration with DEH and in accordance with their *Coast Management Plan of the District Council of Elliston*.

3.6 Management Philosophy & Strategic Directions

The role of reserves is predicated by the twin aims of the *National Parks and Wildlife Act*; to provide for public benefit and enjoyment and to conserve wildlife in a natural environment. Increasingly, the importance of biodiversity conservation is being recognised and the future use and management of reserves must address this issue. Proposed actions will need to be assessed with the ability to meet the primary objective of biodiversity conservation, which may result in public use becoming regulated to serve that aim.

DEH must optimise the use of the limited resources available for the conservation and maintenance of reserves, with priorities set on a statewide and then regional perspective. Within the West Region, most resources are allocated to the maintenance of areas of relatively intact, biologically-diverse habitat containing species or communities of state or national significance, and to locations receiving heavy, concentrated public use. When resources are allocated for annual work programs, Lake Newland Conservation Park has to compete with other parks and regional projects that may be deemed to be of higher priority.

With that proviso, DEH remains committed to its responsibilities as a public land manager and Lake Newland Conservation Park will receive an annual allocation of resources. However, DEH believes that in partnership with the community and other agencies, considerable advances can be made towards increasing overall protection of biological and cultural values, while ensuring sustainable and high-quality recreational opportunities for the community.

The vision for Lake Newland Conservation Park is a park, valued and managed by the community for its visual amenity, biodiversity and recreational values. To achieve this vision, DEH is keen to explore the possibility of partnership arrangements with agencies and organisations that have a legitimate interest in the management of this park. DEH recognises the importance of community and volunteer organisations and will continue to provide ongoing support and assistance, where possible.

In keeping with the park's dedication as a Conservation Park under the NP&W Act, the management strategies will focus as a priority on the conservation of the park's natural resources. Public access and other developments for visitors will reflect the need to protect these natural features. While it is important that the park remain available for recreation, nature studies and to allow for sustainable

recreational fishing along its beaches, it is equally important that inappropriate human impact or use does not compromise the integrity of the natural systems. DEH will pursue the following strategies:

- ensure that exploitation of groundwater in the region allows the continuing flow of the freshwater springs and seepages in the park to maintain the integrity of the existing ecosystem,
- zone the park to ensure that the objectives of appropriate public use, landscape and heritage protection and biodiversity conservation can be achieved,
- conserve geological and landscape qualities, in particular, the beach and dune system, the samphire flats, the saline lakes and freshwater seeps,
- protect the natural environment and its vegetation, particularly the sheoak woodlands,
- protect wildlife habitat, particularly for the wide range of waders and other water birds,
- conserve historic and cultural aspects of the park,
- provide appropriate access to the beach and to the interior of the park,
- provide appropriate low-impact facilities for visitor use and enjoyment,
- provide opportunities for visitors to experience, understand and appreciate the values of the park,
- liaise with neighbours and local instrumentalities to ensure that activities such as pest plant and animal control and commercial ventures, adjacent to and/or within the park, are consistent with park values,
- ensure that the boundaries of the park are appropriate for the protection and conservation of the park values,
- ensure that park protection resources are adequate for pest plant and animal control and that protection actions undertaken are consistent with the park values,
- encourage appropriate research, inventories and monitoring of the natural values of the park, and
- undertake regular review of management achievements against appropriate performance indicators.

4 MANAGEMENT PRESCRIPTION

4.1 Zoning

Background

Section 39 of the National Parks and Wildlife Act provides for the designation of zones in a reserve and constrains the use of land in those zones to the conditions specified in an adopted management plan. Zoning aims to ensure that public use and management actions remain compatible with the protection of park values.

The management zones described below and shown in Figure 2, establish a framework for the sustainable use of the reserve during the life of this plan.

Conservation Zone

This comprises parts of the park that are highly susceptible to damage from vehicle use and as a consequence will be subject to limited access. These areas include the dune system, the beds of the saline lakes and the saline samphire flats. In addition, vehicle movement along the beach above high tide mark should be restricted to protect beach-nesting birds such as Hooded Plovers.

Specified, limited public access is permitted through these areas along defined and designated tracks as shown on Figure 3. Additional walking trails between the lakes and the coast may be considered if vegetation is threatened by increasing visitor foot traffic.

General Park Zone

These are generally less sensitive areas which allow for access to the Development or Visitor Use Zones along designated roads and for passive recreation and nature study activities. The higher ground of the park, such as the area once cleared for grazing by previous owners, is included.

Development or Visitor Use Zone

These areas include sites that have long been used by locals and visitors. They provide the main focus for recreational and educational opportunities. In these zones, developments will be aimed at enhancing day use areas and providing for limited low-impact camping at designated sites. Every effort will be undertaken to ensure that the design and placement of facilities minimises any off-site impacts on the park's natural resources.

Objective

Zone the Lake Newland Conservation Park to ensure that the objectives of appropriate public use, landscape and heritage protection and conservation of the park's biodiversity can be achieved.

Action

• Adopt the zoning plan for the park as shown in Figure 2.

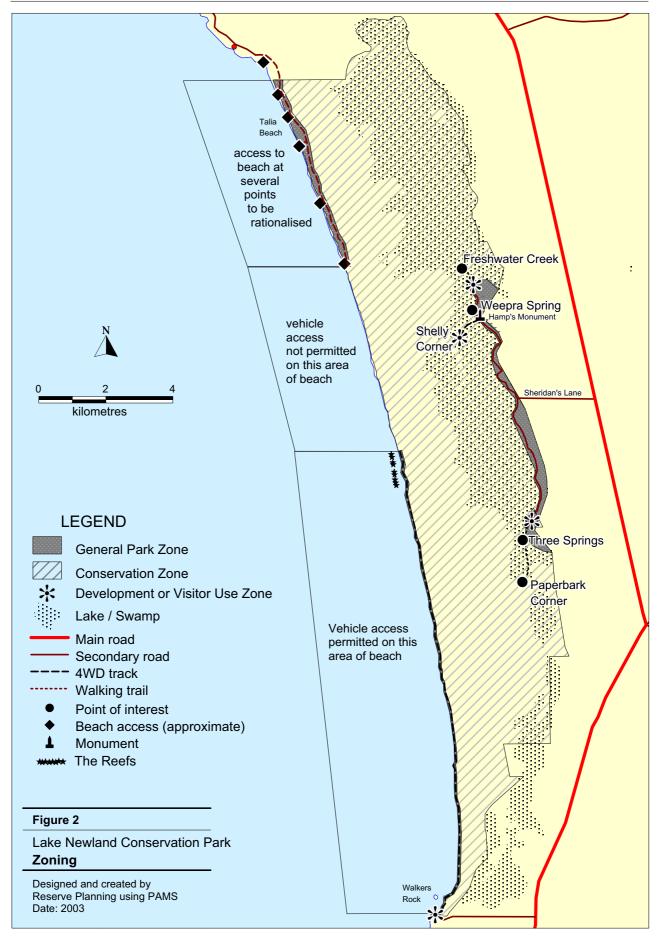
4.2 Natural Resources

4.2.1 Geology and Landform

Background

Lake Newland Conservation Park is a coastal park, with a sandy beach backed by dunes. Behind is a low-lying area of calcreted sand overlain with shallow saline lakes and a series of fresh water springs and seepages. Although it lacks a major watercourse discharging into the sea, the geological formation of Lake Newland Conservation Park resembles the salina landscape of the better known Coorong in the south-east of South Australia. Such landscapes are uncommon on Eyre Peninsula.

The park is underlain by the Gawler Craton, defined by Parker *et al* (1985) as "a geologically stable part of the Earth's crust that has not been subjected to major tectonic forces since 1,450 million years before the present." Gawler Craton rocks date from the Archaean to Middle Proterozoic Periods (Flint 1990). They are predominantly volcanic or plutonic with some clastics (igneous with trapped sedimentary fragments).



Superimposed on the Gawler Craton lie rocks of a large east-west graben (Polda Basin), a deep sequence of sedimentary rocks from the Middle to Late Proterozoic, Permian, Jurassic and Tertiary Periods, bounded by fault lines. The Polda Basin rocks are further overlain with a thin veneer of Quaternary Period sediments, called the widespread Bridgewater Formation. This is undulating limestone formed by the calcreting of a series of sand dunes adjacent to the coast. Calcrete and carbonate-cemented aeolianites form the headlands at Talia Caves and Cape Finniss near Elliston, between which the sands of the Lake Newland Conservation Park have been deposited during the Recent, or Holocene period.

The park contains part of a distinct 38 km segment of the Eyre Peninsula coastline called the Newland Barrier by Short *et al* (1986). This is described as a continuous smoothly curved Holocene dune barrier, bounded by calcarenite at each end, with calcarenite reefs exposed at intervals along the beach. Lake Newland occupies what Short describes as the back barrier depression. For 8 km south of the park, the coastline is relatively sheltered, with Waldegrave Islands and Cape Finniss providing wave refraction and numerous reefs attenuating the waves. The beach of the park itself is a dynamic high-energy surf zone, with high sand deposition and loss. Breaches of the foredunes in the past have transgressed into the Lake Newland depression, breaking the otherwise contiguous nature of this lagoon.

Australia's longest running survey of ocean litter has been undertaken annually along the Anxious Bay beach of Lake Newland Conservation Park since 1991. Initiated by Professor Nigel Wace of the Australian National University, the annual survey is now coordinated by the South Australian Research and Development Institute (SARDI) and is undertaken every year with the assistance of staff and children from the Streaky Bay Area School and the Elliston Primary School.

4.2.2 Soils

Background

Wright (1985) describes the generalized soil-landscapes of the area which includes Lake Newland Conservation Park as Calcarenite Plains where the common feature is an almost continuous, dense, hard calcrete with discontinuous and shallow, mainly red, sandy soils with some shallow, calcareous, loamy soils and calcareous earths. The park area is subdivided into coastal dunes backed by saline plains and lake basins, with calcarenite plains inland.

The dune sands are predominantly shelly or calcareous, as opposed to siliceous. They have low water-holding capacity and are deficient in many plant nutrients, both the macronutrients of nitrogen and phosphorus and particularly micronutrients such as copper, cobalt and manganese. The inland plains are similar, but without visible shell fragments. The inland soils are shallow and alkaline, containing calcareous rubble throughout and some organic darkening for the top 10-20 cm. Soils of the saline lakes are strongly sodic calcareous earths with high salt content. They are underlain by a thick layer of gypsum. Clays may be present.

The coastal dunes are highly susceptible to wind-erosion if the vegetation that binds the dune particles is damaged. Unrestricted movement of people and / or vehicles damages the binding root systems of the coastal vegetation. Further movement of the dunes from blowouts into the Lake Newland system may cover springs with important surface fresh water flows.

Water from winter rain collects in the saline lakes, samphire flats and paperbark scrubs, making much of the central strip of the park impassable to vehicles in winter. This soft ground is easily damaged and marked by vehicles.

Objectives

Preserve the integrity of the soils and landscape features of the park.

Ensure that visitor use, mineral exploration activities and management actions do not destabilise the sand dunes or damage the fragile nature of wetland soils.

Actions

- Control movement of vehicles and pedestrians throughout the park to prevent damage to the sand dunes, saline lakes, samphire flats and related salt pans.
- Maintain the prohibition of vehicle access to the dune system, monitor foot traffic and undertake measures to minimise vegetation damage.
- Rehabilitate dune blowout areas.

4.2.3 Hydrology

Background

The Lake Newland wetlands are of state, national and international significance for the conservation of waders, shorebirds and other waterbirds.

These wetlands have been rated as equal first (along with Big Swamp between Port Lincoln and Coffin Bay) of all wetlands on Eyre Peninsula by Lloyd (1986) by virtue of being a natural coastal salina with numerous freshwater soaks and the exceptionally high diversity of birds, fish and invertebrate fauna for a saline ecosystem. Morelli and Drewien (1993) have also classified them as important wetlands of State significance for their role as a drought feeding refuge and the presence of birds of conservation significance at the State level (Cape Barren Goose, Fairy Tern, Eastern Reef Heron, and Hooded Plover).

The wetlands are classified as nationally important by Environment Australia (Morelli and de Jong, 1996) for their relative integrity in the biogeographic region, for the fact that they provide important habitat as drought refuges and because they support animal taxa which are considered endangered or vulnerable at the national level and five bird species subject to international wetland treaties. In addition, Watkins (1993) has identified the area as being of international importance for shorebirds because of flocks of up to 2,400 birds of the endemic Banded Stilt.

The probable formation of Lake Newland is described in Warren (1982). The lake appears to have formed 5000-6000 years ago as a deep interdune swale lake filled from the marine watertable. Sedimentation filled much of the depth with a laminated gypsum sequence to produce a now shallow lake whose water fluctuates in depth and salinity between winter and summer. The lakes (sections 201, 202, 203, and 212) appear to be of different depths, with the northern lake (section 201) being deeper than the southern lakes.

The saline lakes become shallower and more saline in summer, but are renewed by winter rain and by a number of fresh water springs and seepages which enter the lakes at their edges. These fresh water springs are fed from local groundwater in the Bridgewater Formation (Shepherd 1985).

Fresh water springs form an important source of water for wildlife, and attract a wide range of waters and other water birds in summer. The varying depths of the water in the lake system create habitats for a wide range of water birds.

There are no permanent surface streams in this region of Eyre Peninsula. Fresh water is provided by rainfall and from groundwater only.

A cross-section of the surface geology in the region indicates an undulating Quaternary limestone cap overlying a Tertiary clay layer. This limestone layer (the Bridgewater Formation) is porous and local rainfall infiltrates this limestone rather than discharging as surface water into streams. The thickness of the limestone varies across the region, as this deposit is an ancient dunal system which covers an undulating Tertiary clay land surface.

The location of groundwater bodies (lenses) within the park appears to be controlled by the buried valley and ridge structures of the Tertiary clay. The size (thickness and lateral extent) of these groundwater lenses varies across the region. The direction of groundwater flow is generally towards the coast. The expression of surface springs and seepages along lake edges therefore reflects the location of these groundwater lenses where the lake intercepts the groundwater flow paths (Evans 1997). There may also be a marine salt water table / fresh water interface in this area (Shepherd 1985).

One of these groundwater lenses in the Bridgewater Formation, the Talia Lens, is thought to be one of the main sources of fresh water seepage which feeds the lake system in the park, though detailed geological and geophysical research is needed to verify this (Love *et al* 1994).

Research indicates that the only source of recharge into the groundwater lenses of the Bridgewater Formation is from local rainfall. Groundwater levels and spring flows are therefore directly related to rainfall events. In other regions of the Eyre Peninsula, recharge to similar lenses occurs only after there has been at least ten days of rainfall at a rate of over 10 mm per day during the winter season (Evans, 1997). The availability of fresh water within the park and changes in spring flows are therefore likely to be related to the amount of groundwater recharge available, based on seasonal rainfall and local extractive use.

Fluctuations in the springs flows, closely related to rainfall events, would have occurred prior to Colonial settlement and these variations would have influenced ecological relationships and water bird populations.

Work by Smith (1983) indicates that the salinity in the lakes ranges from 18,000 to over 36,000 mg/litre TDS. Water samples taken from springs had readings ranging between 610 mg/litre and 1,600 mg/litre TDS. For comparison, seawater has a salinity of about 35,000 mg/litre TDS, while the upper limit for potable water is 1,500 mg/litre TDS (SEG report, in press). Smith recorded flows from the northern channel springs as being between 22.6 litre/sec to 10.7 litre/sec.

Maintenance of the wetlands is of key conservation significance. Wildlife, particularly waders and other water birds, relies on the integrity and continuity of fresh water springs and seepages. Maintenance of their natural flow is crucial. Changes in rainfall events and draw down from agricultural and urban use may affect their strength and duration. Spring flows in the park may be adversely affected by inappropriate allocations of groundwater to properties adjacent to the park or perhaps wider afield within the Talia lens.

The majority of Lake Newland Conservation Park (the area in the Hundred of Colton) falls within the County Musgrave Prescribed Wells Area under the *Water Resources Act 1997*, while a small portion (300 ha) of the northern segment of section 287 in Hundred of Downer does not. The Minister for Water Resources endorsed the Water Allocation Plan for the County Musgrave Prescribed Wells Area on 2 January 2001. The plan provides guidelines for the allocation and use of the groundwater in the wider region. At present the Eyre Peninsula Catchment Water Management Board is preparing the Eyre Peninsula Catchment Water Management Plan. DEH is committed to working in partnership with the EPCWMB, and will provide input into this plan to ensure the maintenance of adequate ecological water flows within the park.

Sand dunes within the park are protected by the roots and aerial portions of vegetation which bind the dune particles. The dunes are highly susceptible to wind-erosion if the vegetation cover is damaged. Parts of the northern dune field have become unstable through inappropriate vehicle use and grazing by rabbits. The mobilisation of these damaged dunes poses one of the greatest threats to the lakes, springs and seepages in that part of the park. However, stabilisation of existing mobile dunes may be possible through the establishment of the native grass *Spinifex sericeous*, provided vehicle access is prohibited and Rabbits are controlled.

Additionally, the eventual effects on the wetlands of historic clearance of vegetation both in the park and the surrounding district are unknown, but reports focussed on wetlands generally highlight the possibility of long term slow salination throughout the whole of the spring catchment zones (Morelli and Drewien 1993, Morelli and de Jong, 1996).

Objectives

Maintain the volume and integrity of the groundwater available for the fresh water springs on which the wildlife species, particularly waterbirds, depend.

Ensure that the allocation of groundwater to the park maintains the integrity of the springs and seepages and associated ecosystem.

Conserve the park's geology and landscape qualities, in particular, the sand dune and coastal system, the samphire flats, and the saline lakes and freshwater seeps.

Actions

- Support the necessary geological / geophysical research required to establish details of the source of the water in the springs and the size of the resource.
- Provide input into the Eyre Peninsula Catchment Water Management Plan to ensure an ecological allocation of groundwater for the park which maintains existing discharge points and flow rates.
- Encourage the undertaking of further research into the ecological water flow requirements of the wetlands within the park
- Liaise with the Eyre Peninsula Catchment Water Management Board to ensure that the ecological water requirements of the park are met.

4.2.4 Native Vegetation

Background

No formal surveys of the vegetation associations for the whole park have been undertaken in Lake Newland Conservation Park. DEH has established some specific survey sites in the dunes. The SEG expedition of 1991 conducted some survey work in the park.

Three major types of vegetation appear to occur in the park:

- Coastal Dune Area with coastal shrubland and sheoak woodlands
- Saline Lakes and Flats with samphire low shrubland and tea-tree / paperbark shrubland
- Limestone Plains, probably originally dominated by sheoak woodlands, but now modified by past clearing.

Coastal Dune Area

A survey of the Eyre Peninsula coast for the Coastal Protection Board by Buckley and Fotheringham in 1987 identified vegetation formations along the coastal dunes in Lake Newland Conservation Park as:

Vegetation Formation

Soil Topography

Allocasuarina verticillata low woodland Olearia axillaris open heath Spinifex sericeous tussock grassland deep and shallow sands, swales and dunes deep and shallow sands, swales and dunes frontal dunes

The sand dunes support coastal vegetation common to much of the South Australian sandy coastline. Some of the dunes are mobile with little vegetation, although re-stabilisation of mobile dunes by *Spinifex sericeous* tussock grassland is occurring in some parts of the park.

The presence of Sheoak woodlands along the sand dunes is significant because much of this type of vegetation, which was once widespread in this part of the Eyre Peninsula, has disappeared through the combined actions of Sheep and Rabbits, changing the vegetation to a shrubland of coastal species such as *Acacia anceps* and *Acacia longifolia var sophorae*.

Saline Lakes and Flats

The most obvious plants on the margins or edges of the salinas are Samphires (*Halosarcia* spp, *Sclerostegia arbuscula* and *Sueda australis*) along with other typical salt tolerant species such as *Frankenia* spp, *Wilsonia* spp and *Samolus repens*. Low open woodlands of Swamp Paper-bark (*Melaleuca halmaturorum*) and tussock grassland (*Gahnia* spp) fringe the inundation zones.

Limestone Plains

The limestone plains along the eastern edge of the park were most probably originally covered with Sheoak woodlands, now cleared. DEH staff have mapped dead Sheoak stumps throughout the cleared limestone plains on the eastern edge of the park, east of the saline lakes. Mallee vegetation may also have been present in part. The vegetation throughout this area is now highly modified with a range of introduced pasture grasses and weed species.

There are no maps of the vegetation associations in the park. However, the remnant stands of the Sheoak woodlands in the park provide an opportunity to retain an increasingly rare coastal vegetation type.

Plants of conservation significance in the park are listed in the following table. There are no immediate threats known to these species, but their distribution in the park should be recorded, their status monitored, and any actions required for their conservation implemented.

Plants of conservation significance		Status*	
Scientific Name	Common Name	South Australia	Eyre Peninsula
Austrofestuca littoralis	Coast Fescue		U
Cyperus laevigatus	Bore-drain Sedge		K
Hemichroa pentandra	Trailing Hemichroa		R
Leptorhynchos squamatus	Scaly Buttons		K
Poa crassicaudex	Thick-stemmed Poa		U
Poa fax	Scaly Poa	R	R
Stipa echinata	Spear-grass	R	R
Triglochin striatum	Streaked Arrowgrass		U

* Status Codes

K Uncertain: likely to be either Threatened or Rare but insufficient data for a more precise assessment.

R Rare: low overall frequency of occurrence (may be locally common with a very restricted distribution or may be scattered sparsely over a wider area). Not currently exposed to significant threats, but warrants monitoring and protective measures to prevent reduction of population sizes.

U Uncommon: less common species of interest but not rare enough to warrant special protective measures.

Source: Lang and Kraehenbuehl (2001).

Objectives

Protect native vegetation and ensure that natural processes are maintained to conserve integrity of the park's ecosystems.

Protect the habitat for wildlife, particularly for the wide range of waders and other water birds.

Protect the vegetation types in the park, particularly the remnant Sheoak woodlands and the wetland habitat of waders and water birds.

Revegetate degraded areas.

Initiate and maintain a comprehensive inventory of plant species and vegetation types.

Actions

- Record plant species and distribution on a database with GIS capability (eg PAMS).
- Construct, where necessary, and maintain a stock proof fence on boundaries contiguous with grazing and / or cropping land to protect the native flora and fauna from exotic grazing pressure.
- Manage grazing pressure to allow natural regeneration within cleared areas of the park.
- Encourage assisted regeneration, where possible, within the cleared areas of the park by using propagules of indigenous local species from the same habitat type / vegetation association.

- Prepare and implement, if feasible, a revegetation program for the remnant Sheoak woodlands.
- Monitor Rabbit grazing and other impacts on remnant Sheoak woodlands and, where necessary, implement control measures to minimise such impacts and encourage natural regeneration.
- Investigate the possibility of increasing the revegetation effort within the district to reduce the threat of slow, long term salinisation effects in the freshwater spring catchment zone.

4.2.5 Native Fauna

Background

Birds

Wetland habitats are not well represented on the Eyre Peninsula. This system is unique to the region. In particular, the numerous fresh water springs and seepages which discharge into the saline lakes are important for bird life.

The juxtaposition of ocean and ocean beach, coastal shrubland, and the wetland environment provides for a range of habitats for birds. Over 120 species have been recorded. Significant numbers of migratory wader species and waterfowl can be found in the area.

There have been over 30 species of waterbirds recorded. Waterbirds use the area as drought refuge or as a significant summer feeding habitat. Large numbers of individuals of some species of birds have been recorded as being present at one time, including:

Common Name	Scientific Name	Population Numbers (approx)		
Banded Stilts	Cladorhynchus leucocephalus	up to 2400 individuals		
Cape Barren Goose	Cereopsis novaehollandiae	350		
Black Swan	Cygnus atratus	50-250		
Chestnut Teal	Anas castanea	150-2000		
Red-capped Plover	Charadrius ruficapillus	up to 270		
Masked Lapwing	Vanellus miles	50		
Red-necked Stint	Calidris ruficollis	1000-2000		
Sharp-tailed Sandpiper	Calidris acuminata	300		
Curlew Sandpiper	Calidris ferruginea	150		
Common Greenshank	Tringa nebularia	20		

The area is an important summering area and significant summer feeding habitat for Cape Barren Geese (*Cereopsis novaehollandiae*) according to Robinson *et al* (1982). This significant species breeds on the nearby Waldegrave Islands Conservation Park in winter and disperses to the swamps and lake edges of the mainland in summer.

The area is a migration stopover for seven species of shorebird, the most common being the Rednecked Stint, *Calidris ruficollis*, Curlew Sandpiper, *Calidris ferruginea*, and the Sharp-tailed Sandpiper, *Calidris acuminata*. Five species are listed under national treaties (Morelli and de Jong 1996).

Hooded Plovers, considered to be vulnerable in South Australia, nest and live on the beach just above high water mark. They can be threatened by vehicle movements along the beach.

No other birds of conservation significance are considered to be threatened in the park, but the presence, distribution and status of each of the species in the following table should be recorded and monitored. Any threats should be identified and any actions for their conservation undertaken.

Birds of conservation significance		Status*	
Common Name	Scientific Name	Australia	South Australia
Slender-billed Thornbill	Acanthiza iredalei		V
Grey Goshawk	Accipiter novaehollandiae		R
Musk Duck	Biziura lobata		R
Cape Barren Goose	Cereopsis novaehollandiae		R
Shining Bronze Cuckoo	Chrysococcyx lucidus		R
Peregrine Falcon	Falco peregrinus		R
Blue Petrel	Halobaena caerulea	V	V
Great Crested Grebe	Podiceps cristatus		R
Fairy Tern	Sterna nereis		V
Hooded Plover	Thinornis rubricollis		V

^{*} Status Codes

- V Vulnerable: rare and at risk from potential or long term threats which could cause the species to become endangered in the future.
- **Rare**: low overall frequency of occurrence (may be locally common with a very restricted distribution or may be scattered sparsely over a wider area). Not currently exposed to significant threats, but warrants monitoring and protective measures to prevent reduction of population sizes.

Australian Status: as listed in Environment Protection and Biodiversity Conservation Act 1999

South Australian Status: as listed in National Parks and Wildlife Act 1972

Mammals

Little information is available on the mammals of Lake Newland Conservation Park. The Mammal Club section of the Field Naturalists of SA has not conducted any surveys in the park. An indication of the mammals that might be in the park can be found in Watts and Ling (1985). Western Grey Kangaroos (*Macropus fuliginosus*) are the most obvious mammals in the park. Opportunistic observations indicate that Mitchell's Hopping-mouse (*Notomys mitchelli*) is relatively common along this section of coast.

Reptiles and Frogs

Little information is available on the reptiles and frogs of Eyre Peninsula in general and little for Lake Newland Conservation Park specifically. New records and distributions are still being made. A short informal survey by the SA Herpetology Group Inc in 1997 at the Talia end of the park within the sand dune system recorded 8 species of reptile and one frog. Of these, a single specimen of the Beach Slider (*Lerista arenicola*), is highly significant. It is only the fourth specimen collected in SA for SA Museum records and it was collected some 270 km from the nearest record to the west at Fowlers Bay. It is generally a Western Australian species and this capture extends its known range considerably. It also appears to be a near coastline species (Milne, pers comm). This species has since been recorded in Coffin Bay National Park extending the range even further east. Information about possible reptiles and amphibians of the park can be found in Schwaner *et al* (1985).

Freshwater Fish

Eyre Peninsula has few freshwater fish, with only four exclusively freshwater fish, two predominantly freshwater fish and about twelve mainly marine fish which can be found inland in waters which connect to the sea. Elsewhere in Australia, the Small-mouthed Hardyhead, *Atherinasoma microstoma*, inhabits the brackish and saline waters of estuaries and coastal lagoons and lakes.

However, although Lake Newland does not open to the sea, the Small-mouthed Hardyhead has been found in its permanent spring-fed waters along "Fresh Water Creek" running into Lake Section 201 (Glover and Olsen, 1985).

Salt Lake Invertebrates

Williams (1985) indicates that, as with most salt lakes, the fauna in Lake Newland is a depauperate assemblage of distinctive mainly invertebrate species restricted in distribution to salt lakes. Most fauna of Australian salt lakes is endemic to Australia. As surveys of Eyre Peninsula salt lakes by Williams in 1984 produced several new species, it is possible that there may be species confined to this lake system. Overall, Williams indicates that the area with the closest biological similarity to this park is the Coorong system.

Objectives

Conserve wildlife by maintaining natural habitats, monitoring negative impacts and, where necessary, implementing species management plans.

Maintain a comprehensive inventory of animal species within the park.

Maintain the principal wildlife habitat by conserving the fresh water springs, seepages and saline lakes.

Ensure that visitor use or facilities (such as bird hides) do not impose negative impacts on fragile environments and wildlife.

Actions

- Record animal species and distribution on a database with GIS capability (eg PAMS)
- Monitor wildlife habitats, especially the wetlands, and implement measures to ensure their sustainability.
- Monitor the impacts of vehicle and visitor movements on wildlife, in particular beach-nesting species and implement control measures where necessary.

4.2.6 Research and Research Management Systems

Specific information about the natural resources of the park is limited. In order to manage the park effectively, a good database of the natural resources; in particular, flora and fauna, information about unique features and about species and habitats of conservation significance is needed. The database should aim to provide criteria against which the effectiveness of management actions may be measured.

There is an existing interest in the park by locals and there may be interest in community participation in park management and monitoring.

Objectives

Acquire and maintain a record of biological data for the park and encourage appropriate research, inventories and monitoring of natural values for the assessment of the effectiveness of management actions.

Actions

- Record wildlife species and habitat distribution on a database with GIS capability (eg PAMS).
- Support any appropriate research, inventories and monitoring of the natural values of the park, particularly wetland habitat and associated species.
- Encourage community participation in park management and monitoring.

4.2.7 Introduced Plants

Background

The presence of aggressive exotic plant species provides competition to the native species. The major weed in the park appears to be African Boxthorn (*Lycium ferocissimum*). DEH has been controlling boxthorns in the park as part of a good neighbour policy program which aims to eradicate, or effectively control, boxthorns in the district.

Parts of the eastern edge of the park have been cleared and grazed in the past. There are a number of pastoral weeds in this area, including Lincoln Weed (*Diplotaxis tenuifolia*). It can be expected that the non-aggressive exotic species will diminish over time as the area undergoes natural regeneration.

The aggressive coastal weed, South African Beach Daisy (*Arctotheca populifolia*) was first recorded on Eyre Peninsula along the Lake Newland Conservation Park beach and is now widespread along the South Australian coastline. This melon-leaved, hairy daisy, with big billy-button flowers, has the potential to displace other native coastal species. It may be difficult to eradicate, but should be controlled in the park (Fotheringham, pers comm).

Objectives

Control and, where practical, eradicate introduced plants from the park.

Ensure that park protection resources are adequate for control of pest plants and that park protection actions are consistent with the park values.

Actions

- Control and, where practical, eradicate introduced plants both within the park and by being involved in a district control program.
- Continue the policy of no grazing by stock in the reserve.
- Monitor introduced plant populations in the park to assess the effectiveness of management.
- Encourage a district approach to the control of introduced plants.

4.2.8 Introduced Animals

Background

Red Foxes (*Vulpes vulpes*), European Rabbits (*Oryctolagus cuniculus*), House Mice (*Mus musculus*) and Feral Cats (*Felis catus*) are all present in the park.

The DC of Elliston Centenary Book states that Foxes arrived in the district in 1915. Foxes spread seeds of many environmental weeds such as boxthorns in their droppings, thereby increasing the cost and difficulty of weed management. Foxes and Cats kill and feed on birds, reptiles, frogs and other small animals.

Selective grazing by rabbits greatly inhibits the natural regeneration of native vegetation, particularly Sheoaks. Uncontrolled access of Sheep (*Ovis aries*) to the park also prevents the natural regeneration of native species.

Objectives

Control and, where practical, eradicate introduced animals from the park.

Ensure that park protection resources, including fences, are adequate for introduced animal control and that park protection actions are consistent with the park values.

Actions

- Continue to control and, where practical, eradicate introduced animals within the park and participate in district control programs.
- Monitor introduced animal populations in the park to assess the effectiveness of management.
- Encourage a district approach to the control of feral animals.

4.3 Cultural Heritage

4.3.1 Aboriginal Heritage

Dreaming

For Aboriginal people, land and waters have many interconnected complex meanings and values. The significance of land and waters is central to Aboriginal people's lives: at birth, death, ceremonies, and socially, whilst hunting, gathering camping, and travelling. The term "Dreaming" is the term used to describe the combination of these aspects of life, religion, mythology, law and history, which includes the past, the present and the future.

The land or waters that an Aboriginal person has a traditional or contemporary association with is commonly referred to as "Country." Both "Country" and 'Dreaming" are complex concepts that are difficult for non-indigenous people to understand. For example 'Dreaming can be a site located in song, in physical space or embodied in an object. Its physical, social or psychological importance can vary according to the speaker's traditional country, gender, age and personal experience. For these reasons the 'dreaming' is rarely mapped in the western sense, but the significance of a site is integral for Aboriginal people.

Furthermore, mythological sites associated with these stories are known only to the Aboriginal people with cultural knowledge of the area. These sites are often landscape features which can be one or many trees, rocky outcrops, riverbeds or water holes. These sites physically represent the ancestors and their activities in the story with the knowledge and 'Dreamings' associated with these sites passed down through stories of travellers, ancestors and mythological beings. Many "Dreaming Stories" 'travel' throughout an area and may be known as a "Dreaming trail" or "track". Some stories focus on specific "sacred sites". These stories and traditions exclusively belong to Aboriginal people. Who tells them, where they are told, to whom they are told and when, are all a part of their culture and must be respected.

Gaguda and Nauo/Barngarla Occupation

The Lake Newland area is recorded by anthropologists as being within the lands traditionally associated with the desert Gaguda (Kokatha,) people, who moved north and south between the Gawler Ranges and the coast (Berndt 1985) and also with the Nauo/Barngarla people, who occupied the southern part of Eyre Peninsula.

Following colonial settlement in 1836, the populations of the Aboriginal people in the area were substantially reduced as the result of disease, dispersal, occupation of land and water supplies and through violent conflict. Today they continue to live on their traditional country and practice their culture, language, and traditional associations.

Although the full significance of Lake Newland Conservation Park to Aboriginal people is not known by DEH, anecdotal information such as the Elliston Centenary Committee book indicates that there was seasonal use of the lakes and coastline for hunting and fishing.

A basic archaeological survey for evidence of occupation along the Anxious Bay Coast from Elliston to Fowlers Bay by A Nicholson (1991) included some sites in Lake Newland Conservation Park. The survey provides indicative information about the use of the coastal areas and Lake Newland itself. A traverse of the dunes from the coast to landward just south of Lake Newland Section 201 recorded several open campsites. Nicholson noted less midden material than might have been expected from the landscape, topography and resources. Campsites were also found located near Three Springs and other freshwater springs.

Although one might expect the springs to act as foci for occupation, few archaeological remains were found in their vicinity by Nicholson. These areas have been subject to Colonial disturbance through agricultural activity. It may be expected that a more comprehensive survey would provide better understanding of the extent of the use of the park by Aboriginal people. Knowledge of the cultural and spiritual associations which Aboriginal people may have with the park is not well established in the public domain.

The *Aboriginal Heritage Act 1988* defines a site as 'An area of land that is of significance to Aboriginal tradition, Aboriginal archaeology, anthropology or history.' Site types include:

- Archaeological sites, campsites, middens, artefact manufacturing sites. These may occur in isolation or in conjunction with other sites. These may contain scattered pieces of stone leftover from the manufacture of tools, stone or clay hearths, and food remains such as shellfish or animal bone. Middens are characterised by large deposits of shells. They may also contain animal bone, charcoal, stone tools and possibly skeletal remains.
- **Burial sites.** Can be historic or pre Contact. In some areas burials are marked with stones, logs or brushwood at the head or sides of the grave, however most burial sites are only recognisable when they become exposed by erosion or by disturbance. Many are found in sandy areas where they are readily exposed through erosion.
- Quarry sites stone tool, grindstone and ochre quarries. Quarries can be identified from signs
 of chipping or hammering on suitable rock outcrops and from associated surface scatters of flaked
 stone.
- Stone arrangements- ceremonial, hunting hides, and fish traps. Arrangements can be made out of stone timber or earth. They are distinguished by large or small arrangements of stones laid out in patterns on relatively clear ground, but can also be found across watercourses as fish traps.
- **Mythological sites.** Mythological sites are dreaming sites. These may include natural features in the landscape, such as single trees, rock formations and waterholes to mountain ranges.
- **Historic sites.** Historic sites can include missions; ration depots, birthplaces and fringe camps.
- **Paintings and engravings.** Painting and engraving sites are widely distributed and are found in a range of environments where suitable rock surfaces, shelters and overhangs are found.
- Scar trees. Scar trees exhibit scars on the trunk or limbs where bark has been removed for various purposes to make canoes, shields, dishes or shelters. These are also termed Culturally Modified Trees.

Any land, developed or undeveloped can contain sites. Sites relate to living patterns and use of environmental resources such as water, animal and vegetable foods and stone by Aboriginal people. They also relate to spiritual beliefs, and ceremonial activities.

Certain landforms at Lake Newland likely to contain evidence of Aboriginal pre-historic occupation include:

- *Claypans, lakes and estuaries* (stone artefact scatters, shell middens, rock art, stone arrangements, campsites or ovens)
- Dunes (stone artefact scatters, shell middens, burials, campsites or ovens)
- Bush or forested areas (stone artefact scatters, campsites or ovens)

The South Australian Government is responsible for the protection and preservation of sites objects and remains of significance to Aboriginal people. The Department of State Aboriginal Affairs maintains a Central Archive of some 6,000 site recordings of Aboriginal sites.

Currently 17 sites are listed on the Central Archive for the Lake Newland Conservation Park. These sites are predominantly archaeological sites. These recordings do not reflect a comprehensive survey of the park. To promote better cultural heritage management at Lake Newland further research needs to be undertaken to identify and record sites of significance on the park.

To avoid inadvertent damage to sites DEH shall consult with DOSAA and the relevant Aboriginal authorities before commencement of any development works.

Management of Aboriginal sites is largely at the direction of authorised Aboriginal Heritage Committees, constituted under the *Aboriginal Heritage Act 1988*. DEH has, and will continue to, liaise with Aboriginal people with an interest in the area.

4.3.2 Colonial Heritage

Matthew Flinders first mapped this part of the west coast of Eyre Peninsula, naming many geographical features, during his voyage in *The Investigator* in 1802. In an entry for 10 February 1802 in his diary, Flinders recorded "These islands (Waldegrave Islands) form the southern boundary, as Cape Radstock does the north point, of a great open bay, which, from the night we passed in it, obtained the name of Anxious Bay."

The first land explorer of this part of the coast, from Port Lincoln to Streaky Bay, was Edward John Eyre in 1839. Lake Newland itself was named by Eyre in 1840 after a friend, bank manager R F Newland. Eyre (1845) considered the area around Lake Newland favourable for grazing because of the numerous, fine, strong springs of excellent water at Lake Newland and the surrounding grassy country, although the general area he considered as "uninviting" (Twidale and Campbell, 1985).

The first use of Lake Newland as a pastoral block is not known but the Government *Gazette* of 30 September 1847 lists both William Pinkerton and William Nation as applicants for runs 'on Lake Newland'.

Near Weepra Springs, at Stony Point, is a monument to the death on 23 June 1848 of John Hamp, a shepherd on Pinkerton's run, part of Mount Wedge Station. He was allegedly speared by two Aboriginal individuals, Malgalta and Mingalta, who, although initially brought to trial and sentenced to death, were subsequently acquitted as their guilt had not been adequately established.

Pinkerton subsequently abandoned the Lake Newland area owing to the hostilities of the natives, and later, in the early 1850s, Andrew Tennant and John C Hamp settled in the area at 'Salt Creek'. This Hamp is the son of the murdered shepherd.

The grave of another unknown shepherd who apparently met with the same fate as John Hamp senior, is located in the swamp grass near the edge of Lake Newland.

John Thomson took up land near Lake Newland in 1876 and named it Weepra Park, 'weepra' apparently being an Aboriginal name for 'running water' (Elliston Centenary Committee 1987).

The Cobb & Co mail coach route is said to have run along the eastern edge of the lakes and lagoons, starting near Gwayleigh, as part of the route from Bramfield to Talia.

Several reminders of early pastoral endeavours remain in the park, including a stone wall, and remnants of fencing around Weepra Springs.

The Federal Salt Company used the central lake for salt collection for eighteen months around 1903. Improvements included a road, a light railway line, refining plant erected on dry ground which was worked by a large engine, the flywheel of which weighed 17 hundredweight. Up to 30 men were employed on the works. Two eating houses, one kept by Miss Higgins and one by Mrs Grattin were erected. A town called Federal Town was surveyed adjoining Flinders Highway (Kenny, quoted in SEG, in press). Little remains of this mining operation in terms of machinery, structures or buildings apart from the raised entry road and some few footings and rusted machinery parts.

Local Heritage Status

The Monument to John Hamp, (N 6304550 E 487700, Talia 1:50,000 topographic map) which is a random stone monument with the inscription "John Hamp was killed by the natives near this spot, May 3 1848. Erected in 1971 by the Port Lincoln Caledonian Society, P J Baillie, Chief" and the remains of Hamp's Hut nearby (a pile of stones) was recommended for Local Heritage Status by a Heritage Survey of Eyre Peninsula and West Coast in 1987.

DEH acknowledges that Aboriginal people have a strong relationship with land and that this park may be important to particular Aboriginal groups. The facilitation of Aboriginal participation in park management is an important goal within the department's strategic directions.

Ample evidence exists of Aboriginal occupation in the park (Nicholson, 1991). A thorough archaeological survey of sites, in conjunction with representatives of the Native Title claimants, will facilitate better protection of any important cultural resources.

Known sites of previous Aboriginal occupation should not be disturbed by park developments nor by the provision of vehicle access, particularly across the dune areas. There may be important, but as yet unknown, culturally significant sites which should not be disturbed by any future developments.

Parts of the park have been grazed by stock for about 100 years. Evidence of this activity includes stone walls, old fences and cleared vegetation on the eastern edge of the park. Remnants of the salt /gypsum mining operation exist in the centre of the park. Sites with Local Heritage Status should be properly protected.

There is potential for interpretation of the history of the area as well as providing information about early contact between Colonial and Aboriginal people in the area.

There are no sites within the park currently on the State Heritage Register (Angas, pers comm), nor is the park on the Register of the National Estate.

Objectives

Conserve and protect significant archaeological, cultural or historical sites and provide suitable interpretive material.

Provide opportunities for the participation of Aboriginal organisations with an interest in the management of the park.

Actions

- Consult Aboriginal people who have a traditional association with the land, Native Title Claimants and relevant State and Federal Aboriginal heritage authorities, in decisions regarding the management of Aboriginal cultural heritage.
- Before proceeding with any development works within the reserve, obtain an assessment and clearance from the appropriate authority, under the provisions of the *Aboriginal Heritage Act* 1988.
- Identify, record, protect, restore and monitor known or relocated sites and items of archaeological, anthropological, cultural and historical significance located in the park, in cooperation with the Department of State Aboriginal Affairs, the Heritage branch of DEH and other relevant authorities and organisations. Aboriginal and historic cultural heritage sites require conservation plans to facilitate appropriate management.
- Research and inventory, historic sites and stories that relate to the history of the park and where appropriate, make this information available to visitors through interpretive material.
- Encourage and support archaeological, anthropological and historic studies within the park. All sites located during these surveys should be recorded to the standards set by the Heritage branch of DEH and/or DOSAA and submitted for inclusion on the DOSAA Central Archive and/or State Heritage Register.
- Protect and interpret all heritage sites and artefacts of historic and cultural importance.

4.4 Fire management

Background

DEH has a responsibility to manage all aspects of fire in its reserves from wildfires to campfires. Fires can have a significant impact on parks from affecting public safety to habitat alteration. A Fire Response Plan has been prepared for parks in the Eyre District. This plan provides guidelines for managing wildfire.

The park is considered to be a low risk area for wildfires, bounded by the ocean on the long western edge and cleared land on the long eastern edge and with a series of open shallow water saline lakes and open salt flats with succulent samphire and related bushes in the central strip of the park. The DC of Elliston has no records of recent fires in the park (DC of Elliston, pers comm.).

Objectives

Manage wildfire within the park boundaries in accordance with Departmental policy with the primary objective to protect life, property and the environment.

Minimise the potential and real impact of campfires on the environment.

Reduce the threat of wildfire through planning and fire prevention strategies.

Ensure that park protection resources are adequate for fire management and the park protection actions are consistent with the park values.

Actions

- Maintain a close liaison with the local CFS Group and Brigade on all aspects of the management of fire issues.
- Review the DEH Eyre District Fire Response Plan and Fire Management Statement as required.
- Control the use of fire within the park by prohibiting wood fires all year throughout the park including both the picnic and camping areas.
- Provide information about the Park Fire Prohibitions to visitors.
- Maintain access for fire control along the eastern and northern boundary on cleared land.

4.5 Recreation and Tourism

Tourism figures from District Council of Elliston are presented as a year round visitor patronage in excess of 15,000. They include short term travellers, site-specific visitors with annual holiday plans, plus inland Eyre Peninsula residents using the area for recreation and holidays.

Park estimates for annual visitation are 1,000 recreational fishers to Walkers Rock, The Reefs and Talia Caves beach area, 200 visitors camping, birdwatching and / or bushwalking in 2 or 3 areas along the lake fringe near the springs. Very occasionally, special interest groups visit the park, such as the SEG program in 1991 and the SA Herpetology Group in 1998.

4.5.1 Visitor Use

Background

Locals and visitors to the region predominantly use the park for recreational fishing and family beach activities. A limited number of bird watchers use the edges of the lagoons and associated fresh water springs and seepages to observe birds. The DC of Elliston is now actively promoting the area and visitor numbers can be expected to increase.

There is currently low visitation to Lake Newland Conservation Park. Most visitors to the park are beach and ocean focussed. Highest visitation is to Walkers Rock at the southern end of the park where there is access to the beach by conventional vehicles. Estimates by the DC of Elliston are that 90% of those people who travel further into the park along the beach go north from Walkers Rock, with 30% going as far as Lovers Rocks, 60% going to The Reefs (13 km mark), and 10% travelling the total length of the beach to Talia Caves. The pattern of use is to drive below high tide mark at low tide, fish the incoming tide and driving back on the next low tide.

Although the beach is the focus for the majority of visitors, a few are interested in remote camping or visit specifically to observe the bird life on the lakes.

Much of the vegetation within the park is slow growing and scrubby. It does not produce large amounts of wood. The indiscriminate use of wood for fires may significantly denude areas currently popular for picnics and for camping, altering animal habitat.

The current road network and park signs do not clearly outline the opportunities, rights and responsibilities of visitors to the park. Visitor facilities are also inadequate.

Objectives

Provide opportunities for visitors to experience, understand and appreciate the values of the park.

Provide appropriate low-impact facilities to manage human impacts on the park and increase visitor enjoyment.

Actions

- Monitor the impact of visitor use and implement measures to conserve natural values, including the provision of low-impact campsites and walking trails.
- Prohibit the use of park-collected firewood.
- Provide for low-impact bird watching with walks and a bird hide along the eastern edge of Middle Lake (Section 212) at Three Springs as shown on Figure 3.
- Provide information and interpretive material on topics including the wetland habitat, the freshwater springs and seepages and wetland birds, that promotes an understanding of the park's values and natural features and encourages visitor activities that do not compromise the fragile nature of the environment.

4.5.2 Vehicle Access

Background

One all weather section of road within the park - a causeway across samphire flats which was constructed as part of a salt (gypsum) harvesting business - remains off Sheridans Lane. There are several other rough tracks in this vicinity to Weepra Springs and to the stone monument to John Hamp.

Public access to many parts of the park is limited. The park landscape looks attractive from the highway to the east of the park but there is no access to the beach through the dunes within the park except near the southern and northern boundaries. The beach is a major attraction to recreational surf and reef fishers but is inaccessible by conventional vehicles except at Walkers Rock near the southern boundary. The section of beach adjacent to The Reefs has been a popular recreational fishing spot for many years. This area remains accessible by 4WD via Walkers Rock and the southern end of the beach. Access to the northern end of the park is by 4WD through private property past the Talia Cave geological formations.

The coastal beach is formed from high energy wave action and access by 4WD along the northern beach is very difficult between Talia Caves and The Reefs. As a result, current access is through the swale behind the fore-dune with regular side tracks to the beach. The risk of "blow-outs" in the fore-dune is a significant threat to the vegetation cover and the integrity of the dunefield. Continuing indiscriminate vehicle use of the dune areas cannot be sustained.

A single all weather track called Sheridans Lane leads to the edge of the saline lake system about half way along the park's length. The saline lakes and associated bird life have been subjected to duck hunting in the past, but the conservation status of the park now precludes this activity. There has been increasing interest in bird watching and people sometimes camp in the park for that purpose.

The current access tracks within the park travel close to the saline lakes and in places traverse the samphire flats. These are likely to be impassable for the winter months. The track system will be rationalised as there is a proliferation of tracks in areas of samphire flats which reduce the aesthetic and natural values of the park and which would be prohibitively expensive to upgrade to all weather tracks.

Road repair and maintenance may require the importation of rubble and road-building materials. There are, however, several modified sites within the park that could provide road-building material, should it prove difficult to source from outside the park, or if there are environmental concerns with importing it into the park (eg. Importing weed species).

There is currently interest throughout the Gawler Craton in exploration for mineral deposits, which may possibly include the park area. Restrictions on visitor transport ought to apply to any exploration activity in the park.

Objectives

Provide appropriate access to the beach and to the interior of the park.

Conserve the natural values of the park by restricting access to, and rationalising designated tracks.

Actions

- Regulate and maintain appropriate access to the beach for recreational fishers and recreation along the beach.
- Provide park signs at Sheridans Lane and other appropriate places along the Flinders Highway which indicate that access to the beach is not possible through the park.
- Provide appropriate access as depicted in Figure 3, to parts of the central area of the park from Sheridans Lane for passive recreation focussed on the natural heritage of the park.
- Realign the track along the eastern edge of the park to higher ground to allow for all-weather access.
- Rationalise the tracks in the low lying samphire flats.
- Restrict vehicle use including 4WD access to the tracks identified in Figure 3.
- Prohibit the use of 4WD vehicles along the beach for a section of coastline between Talia Beach and the northern end of The Reefs.
- Continue to monitor vehicle use and rationalise tracks when necessary to conserve natural values.
- Ensure that road-building material is sourced from a disease-free area.
- If no suitable borrow pit exists outside the park, source road building material from degraded areas of the park.
- Rehabilitate and revegetate used borrow pits.

4.5.3 Walking Trails

Background

Both the dunefields near the coast and the samphire flats surrounding the lakes are environments susceptible to disruption or erosion from excessive foot traffic. Some areas, particularly near the lakes, may only be traversed easily in summer.

Foot traffic should be monitored in the dune system adjacent to popular sites and measures implemented to reduce any negative impacts. If visitor numbers to the park increase, and the integrity of the dune system is compromised by excessive foot traffic, it may be necessary to delineate one or more walking trails from the lake, through the dunes to the coast. Trails would be developed in consultation with the District Council of Elliston and community groups, and routed to ensure minimal impact upon the environments of the park.

A walking trail should be developed near the lake, incorporating bird hides at strategic locations.

Objectives

Provide opportunities for visitors to enjoy the park on foot while conserving the park's natural values.

Actions

- Establish a walking trail near the lake edge to a bird watching site at Three Springs as shown on Figure 3.
- Monitor the impact of visitor foot traffic and provide marked walking trails where necessary.

4.5.4 Camping and Day Visit Areas

Background

There are no recreation facilities specifically established within the park by DEH. However, the DC of Elliston has recently established a visitor car park, toilets and basic camping facilities on the coastal reserve at Walkers Rock, adjacent to the southern tip of the park. The Council has also undertaken the development of day visit and car parking facilities at Talia Cave area just outside the northern boundary of the park.

The regional *Coast Management Plan of the District Council of Elliston* draws attention to a variety of day trip tourism opportunities and campsites within the park. Day trip opportunities include walks and bird watching, potentially from bird hides, at the Lake Newland (Section 212) wetland areas (DC of Elliston, 1995).

There are suitable locations for bird watching near a fresh water soak along the eastern edge of the saline lakes, especially the area known locally as Three Springs. A hide constructed at this site would provide ample opportunity for visitors to view birds without unduly disturbing them. Future campsites could be developed to the north east of this location on suitable soil. However, revegetation will be required to provide adequate shade and screening. This needs to be established prior to opening a campsite at this location.

There are very limited suitable locations for low-impact camping which both have shade in summer and do not become inundated in winter. One small area, accessible by 4WD vehicle, exists along a north-western edge of the saline lakes. See Figure 3.

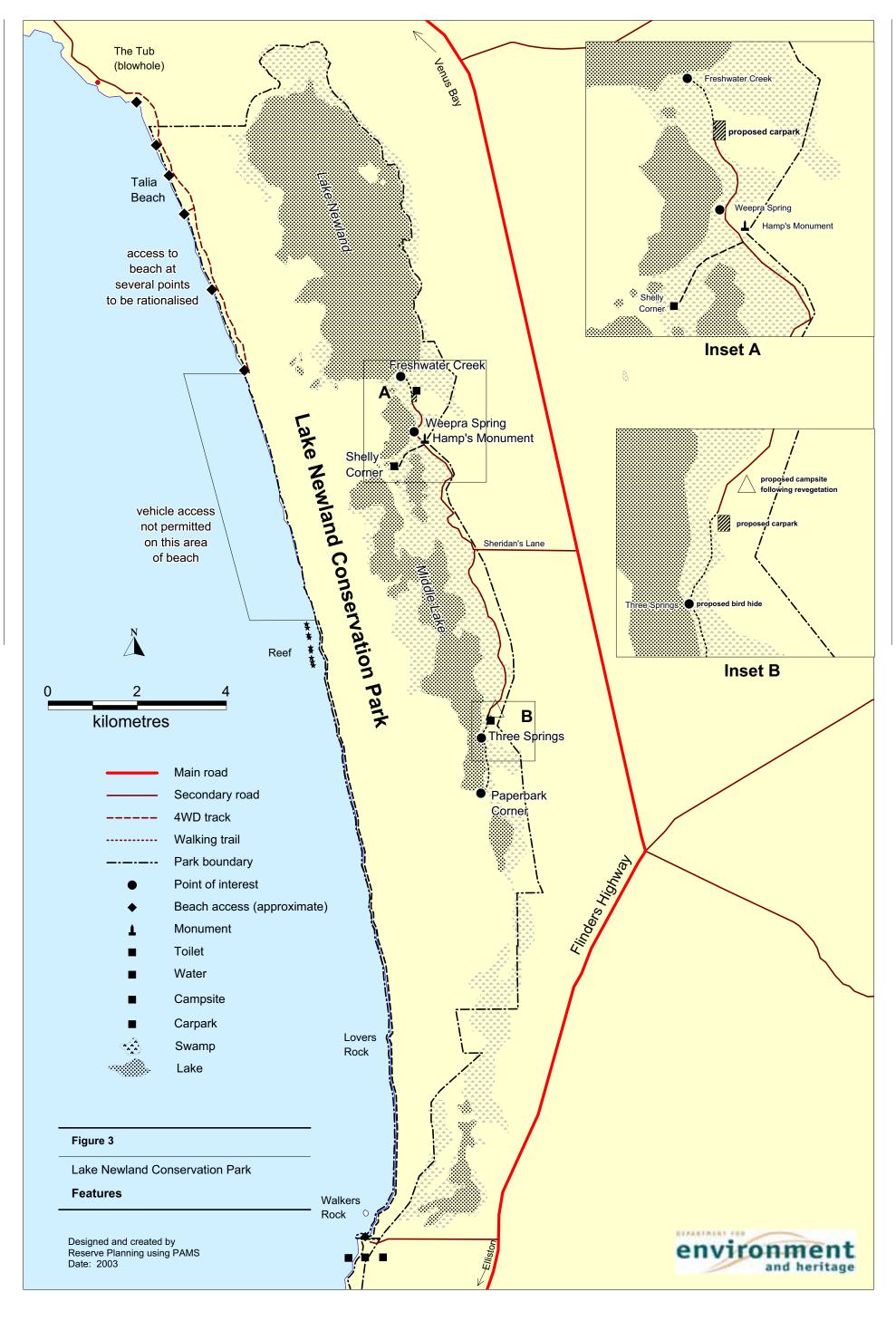
Objectives

Provide appropriate facilities for day visitors and campers to enhance their enjoyment and appreciation of the park and its natural values.

Ensure that the placement and development of facilities such as camping sites, walks, and bird watching hides does not threaten the natural and geological features, the presence of water birds, or sites of cultural significance.

Actions

- Liaise with the District Council of Elliston regarding any developments at, and management of the camp sites at Walkers Rock and Talia Caves.
- Provide for low-impact camping facilities at Shelly Corner near the dunes and near the Three Springs bird hide as shown on Figure 3. Such facilities may include designated vehicle parks, tent sites and cooking areas.
- Establish an area of revegetation with local indigenous species for the proposed camping area near the Three Springs bird hide as shown on Figure 3.
- Formalise and upgrade the day visit, parking and camping areas at Walkers Rock shown on Figure 3 in conjunction with the DC of Elliston.
- When the Three Springs campsite is established, review continued use of Shelly Corner campsite, closing if necessary to protect the fragile dune environment.
- Monitor popular sites in the park and when necessary provide appropriate facilities including
 designated vehicle parks, tent sites, native trees for shading, walkways, picnic tables, seating,
 vehicle barriers and gas cooking areas, for visitor safety, convenience and enjoyment while
 minimising impacts on natural values.



4.5.5 Visitor Information and Interpretation

Background

There are no park signs, apart from DC of Elliston signs at Walkers Rock and one small sign at the turn-off from the Flinders Highway into Sheridans Lane.

Objectives

Ensure directional and information signs are adequate to complement the conservation of park values, aid visitor enjoyment and management and do not compromise the conservation value of the park.

Actions

- Erect park signs identifying the park and providing information about the park values and facilities at entrance points and, where appropriate, identifying significant park features.
- Provide appropriate interpretive material about the park features and values.

4.6 Commercial Activities

Currently no leases or concessions are let in the park.

4.6.1 Mining Leases

Background

A portion of the shallow saline lakes near Sheridans Lane was once used for the mining of salt by the Federal Salt Company around 1903. However, because of the low price of salt, the cost of transport and location of the lake the operation was short-lived (Kenny, quoted in SEG, in press). Little remains of this mining operation.

The Gawler Craton and the Polda Basin have been subject to a high level of interest in the recent past for their potential prospectivity for hydrocarbons, coal and base-metal minerals. However, exploration in the vicinity of the park had been very limited prior to park dedication and PIRSA agreed to a joint proclamation for existing rights under the *Mining Act 1971*.

At the time of writing this plan, there are no existing mineral exploration licences granted or being considered for the park.

Objectives

Ensure that mineral exploration and mining activities in the park are consistent with best practice environmental management and that they minimise impacts on conservation values.

Actions

- Specify, in any applications for mineral exploration licences, that sensitive environments like the wetlands and dune systems must not be disturbed and that sites and tracks should be rehabilitated such that they have returned to a pre-impact state within ten years of abandonment.
- Monitor any work associated with mining to ensure that conditions are met for minimising impacts on conservation values.
- Restrict vehicle use to the public access routes shown in Figure 3, as far as possible, in exploration for mineral deposits.

4.7 Management Arrangements

4.7.1 Partnerships and Cooperative Management

Background

The Department for Environment and Heritage supports and promotes partnerships and cooperative management arrangements to establish integrated natural resource management. This requires the development of substantial working relationships with government agencies, local authorities and local communities.

Aboriginal Partnerships

DEH is committed to reconciliation and to the development of partnerships with indigenous communities to effectively manage parks and wildlife in a way that respects both contemporary and traditional culture, knowledge and skills. Partnerships involve the delivery of programs that promote reconciliation, cultural awareness, indigenous employment and training, joint management and indigenous cultural heritage management on parks.

Furthermore, consistent with South Australian Government policy, DEH is keen to pursue Indigenous Land Use Agreements (ILUA's), which are voluntary agreements between native title groups and other people about the use and management of country.

District Council of Elliston

The DC of Elliston has recently established a car park, basic camping area and toilets on the coastal reserve at the southern boundary of the park at Walkers Rock. While these facilities do not meet DEH design standards, a cooperative approach to developments at, and management of, these facilities needs to be established.

The DC of Elliston has expressed interest in a partnership agreement with DEH to establish and develop day visit and camping opportunities within the park, particularly bird hides and camping areas.

The council has also recently established several car parks, access tracks and interpretive signage immediately to the north of the park, close to scenic attractions in an area known as the Talia Caves. It has also expressed an interest in defining some camping areas in the vicinity. A gate allows vehicle access to private land on the southern edge of Talia Caves area (just north of the park) from which the northern beach area of the park may be accessed.

Eyre Peninsula Catchment Water Management Board

The preservation and protection of saline lakes within the reserve is a central theme of this plan. DEH will continue to build an ongoing partnership with the EPCWMB to ensure that environmental water flows to these areas are maintained.

Community and Volunteer Involvement

Apart from partnerships with Aboriginal organisations and local government, opportunities may exist to encourage community participation in park management and monitoring through the Eyre Consultative Committee, Landcare groups, other community or school groups or through establishing a Friends of Parks Group.

Objectives

Encourage community involvement in park management and develop programs with volunteer participation which fulfil conservation management objectives.

Continue to develop working relationships with Aboriginal people who have a traditional association with the land comprising the park.

Develop partnerships with park neighbours, local organisations, district council, the EPCWMB and Aboriginal organisations to assist with developments in the park and the conservation of its natural values.

Actions

- Take steps to involve Native Title Claimants and other Aboriginal people who have a traditional association with the land comprising the park, in the management of the reserve and the preservation of their cultural heritage, by negotiating an Indigenous Land Use Agreement for the park.
- Liaise with the DC of Elliston to ensure a cooperative approach to the provision, maintenance and design of existing and any proposed day and camping facilities at Walkers Rock or Talia Caves.
- Investigate the possibility of a partnership agreement with the DC of Elliston or other community groups for the provision and management of any low impact access, camping or day visitor facilities within the park.
- Establish an effective communication network with the local community and stakeholders regarding park management issues.

4.8 Future Directions

4.8.1 Additional Land

The boundaries of a park should ensure effective biodiversity management and conservation of the values for which the park was dedicated. Additional land should be acquired when available, if it significantly improves the biodiversity values of the park within a regional context, or if it permits more efficient and effective management of the biodiversity values or visitor access and use.

Effective management of visitors includes management of vehicle access. Currently access to fishing sites along the coast is via the beach itself. Local recreational fishers are generally aware that this is possible by driving between low and high water marks at low tide, fishing the rising tide and returning the same way on the next low tide. The majority of this strip of land (between high and low water mark) is undedicated Crown land, the exception being Allotment 10 of Deposited Plan 29068 at the southern end of the park, which was dedicated in 1996.

Section 214, Hd of Colton, immediately south of the park, was gazetted in 1995 as a Coastal Conservation and Recreation Reserve under the *Crown Lands Act 1929*.

Objective

Ensure that the boundaries of the park are appropriate for the protection and conservation of park values in a bioregional context.

Actions

• Incorporate all Crown land along the beach of the park between High and Low Water Mark into the park to effectively manage the activities of visitors on the beach.

5 SUMMARY OF MANAGEMENT ACTIONS

ACTION	PRIORITY	DURATION
Zoning		
Adopt the zoning plan for the park as shown on Figure 2.	High	12 months
Natural Resources		
Soils		
Control movement of vehicles and pedestrians throughout the park to prevent damage to the sand dunes, saline lakes, samphire flats and related salt pans.	High	Ongoing
Maintain the prohibition of vehicle access to the dune system, monitor foot traffic and undertake measures to minimise vegetation damage.	High	Ongoing
Rehabilitate dune blowout areas.	High	ongoing
Hydrology		
Support the necessary geological / geophysical research required to establish details of the source of the water in the springs and the size of the resource.	High	12 months
Provide input into the Eyre Peninsula Catchment Water Management Plan to ensure an ecological allocation of groundwater for the park which maintains existing discharge points and flow rates.	High	12 months
Encourage the undertaking of further research into the ecological water flow requirements of the wetlands within the park.	High	Ongoing
Liaise with the Eyre Peninsula Catchment Water Management Board to ensure that the ecological water requirements of the park are met.	High	Ongoing
Native vegetation		
Record plant species and distribution on a database with GIS capability (eg PAMS).	Medium	Ongoing
Construct, where necessary, and maintain a stock proof fence on boundaries contiguous with grazing and / or cropping land to protect the native flora and fauna from exotic grazing pressure.	Medium	Ongoing
Manage grazing pressure to allow natural regeneration within cleared areas of the park.	Medium	Ongoing
Encourage assisted regeneration, where possible, within the cleared areas of the park by using propagules of indigenous local species from the same habitat type / vegetation association.	Medium	Ongoing
Prepare and implement, if feasible, a revegetation program for the remnant Sheoak woodlands.	Medium	Ongoing
Monitor Rabbit grazing and other impacts on remnant sheoak woodlands and, where necessary, implement control measures to minimise such impacts and encourage natural regeneration.	Low	Ongoing
Investigate the possibility of increasing the revegetation effort within the district to reduce the threat of slow, long term salination effects in the freshwater spring catchment zone.	High	Ongoing

ACTION	PRIORITY	DURATION
Native fauna		
Record animal species and distribution on a database with GIS capability (eg PAMS).	Medium	Ongoing
Monitor wildlife habitats, especially the wetlands, and implement measures to ensure their sustainability.	Medium	Ongoing
Monitor the impacts of vehicle and visitor movements on wildlife, in particular beach-nesting species and implement control measures where necessary.	Medium	Ongoing
Research and Research Management Systems		
Record wildlife species and habitat distribution on a database with GIS capability (eg PAMS).	Medium	Ongoing
Support any appropriate research, inventories and monitoring of the natural values of the park, particularly wetland habitat and associated species.	Medium	Ongoing
Encourage community participation in park management and monitoring.	Low	Ongoing
Introduced plants		
Control and, where practical, eradicate introduced plants both within the park and by being involved in a district control program.	High	Ongoing
Continue the policy of no grazing by stock in the reserve.	High	Ongoing
Monitor introduced plant populations in the park to assess the effectiveness of management.	High	Ongoing
Encourage a district approach to the control of introduced plants.	High	Ongoing
Introduced animals		
Continue to control and, where practical, eradicate introduced animals within the park and participate in district control programs.	High	Ongoing
Monitor introduced animal populations in the park to assess the effectiveness of management.	High	Ongoing
Encourage a district approach to the control of feral animals.	High	Ongoing
Cultural Heritage		
Consult Aboriginal people who have a traditional association with the land, Native Title Claimants and relevant State and Federal Aboriginal heritage authorities, in decisions regarding the management of Aboriginal cultural heritage.	High	Ongoing
Before proceeding with any development works within the reserve, obtain an assessment and clearance from the appropriate authority, under the provisions of the <i>Aboriginal Heritage Act 1988</i> .	High	Ongoing
Identify, record, protect, restore and monitor known or relocated sites and items of archaeological, anthropological, cultural and historical significance located in the park, in cooperation with the Department of State Aboriginal Affairs, the Heritage branch of DEH and other relevant authorities and organisations. Aboriginal and historic cultural heritage sites require conservation plans to facilitate appropriate management.	High	Ongoing
Research and inventory, historic sites and stories that relate to the history of the park and where appropriate, make this information available to visitors through interpretive material.	Medium	Ongoing

ACTION	PRIORITY	DURATION
Encourage and support archaeological, anthropological and historic studies within the park. All sites located during these surveys should be recorded to the standards set by the Heritage branch of DEH and/or DOSAA and submitted for inclusion on the DOSAA Central Archive and/or State Heritage Register.	Medium	Ongoing
Protect and interpret all heritage sites and artefacts of historic and cultural importance.	High	Ongoing
Fire Management		
Maintain a close liaison with the local CFS Group and Brigade on all aspects of the management of fire issues.	Medium	Ongoing
Review the DEH Eyre District Fire Response Plan and Fire Management Statement as required.	Medium	Ongoing
Control the use of fire within the park by prohibiting wood fires all year in both the picnic and camping areas.	High	Ongoing
Provide information about the Park Fire Prohibitions to visitors.	High	Ongoing
Maintain access for fire control along the eastern and northern boundary on cleared land.	Medium	Ongoing
Recreation and Tourism		
Visitor Use		
Monitor the impact of visitor use and implement measures to conserve natural values, including the provision of low-impact campsites and walking trails.	Medium	Ongoing
Prohibit the use of park-collected firewood.	High	Ongoing
Provide for low-impact bird watching with walks and a bird hide along the eastern edge of Middle Lake (Section 212) at Three Springs as shown Figure 3.	Medium	2 YEARS
Provide information and interpretive material on topics including the wetland habitat, the freshwater springs and seepages and wetland birds, that promotes an understanding of the park's values and natural features and encourages visitor activities that do not compromise the fragile nature of the environment.	Medium	2 years
Vehicle Access		
Regulate and maintain appropriate access to the beach for recreational fishers and recreation along the beach.	High	Ongoing
Provide park signs at Sheridan's Lane and other appropriate places along the Flinders Highway which indicate that access to the beach is not possible through the park.	Medium	12 months
Provide appropriate access as depicted in Figure 3, to parts of the central area of the park from Sheridans Lane for passive recreation focussed on the natural heritage of the park.	Low	2 years
Realign the track along the eastern edge of the park to higher ground to allow for all-weather access.	Medium	2 YEARS
Rationalise the tracks in the low lying samphire flats.	High	2 years
Restrict vehicle use including 4WD access to the tracks identified in Figure 3.	High	Ongoing

ACTION	PRIORITY	DURATION
Prohibit the use of 4WD vehicles along the beach for a section of coastline between Talia Beach and the northern end of The Reefs.	High	Ongoing
Continue to monitor vehicle use and rationalise tracks when necessary to conserve natural values.	Medium	Ongoing
Ensure that road-building material is sourced from a disease-free area.	High	Ongoing
If no suitable borrow pit exists outside the park, source road building material from degraded areas of the park.	High	Ongoing
Rehabilitate and revegetate used borrow pits.	High	Ongoing
Walking Trails		
Establish a walking trail near the lake edge to a bird watching site at Three Springs as shown on Figure 3.	Medium	2 years
Monitor the impact of visitor foot traffic and provide marked walking trails where necessary.	Low	Ongoing
Camping and Day Visit Areas		
Liaise with the District Council of Elliston regarding any developments at, and management of the camp sites at Walkers Rock and Talia Caves.	High	Ongoing
Provide for low-impact camping facilities at Shelly Corner near the dunes and near the Three Springs bird hide as shown on Figure 3. Such facilities may include designated vehicle parks, tent sites and cooking areas.	Medium	2 YEARS
Establish an area of revegetation with local indigenous species for the proposed camping area near the Three Springs bird hide as shown on Figure 3.	Medium	2 YEARS
Formalise and upgrade the day visit, parking and camping areas at Walkers Rock shown on Figure 3 in conjunction with the DC of Elliston.	Medium	2 years
When the Three Springs campsite is established, review continued use of Shelly Corner campsite, closing if necessary to protect the fragile dune environment.	Low	3 years
Monitor popular sites in the park and when necessary provide appropriate facilities including designated vehicle parks, tent sites, native trees for shading, walkways, picnic tables, seating, vehicle barriers and gas cooking areas, for visitor safety, convenience and enjoyment while minimising impacts on natural values.	Meduim	Ongoing
Visitor Information and Interpretation		
Erect park signs identifying the park and providing information about the park values and facilities at entrance points and, where appropriate, identifying significant park features.	Medium	12 months
Provide appropriate interpretive material about the park features and values.	Medium	2 years
Commercial Activities		
Mining Leases		
Specify, in any applications for mineral exploration licences, that sensitive environments like the wetlands and dune systems must not be disturbed and that sites and tracks should be rehabilitated such that they have returned to a pre-impact state within ten years of abandonment.	High	Ongoing

ACTION	PRIORITY	DURATION
Monitor any work associated with mining to ensure that conditions are met for minimising impacts on conservation values.	High	Ongoing
Restrict vehicle use to the public access routes shown in Figure 3, as far as possible, in exploration for mineral deposits.	High	Ongoing
Management Arrangements		
Partnerships and Cooperative Management		
Take steps to involve Native Title Claimants and other Aboriginal people who have a traditional association with the land comprising the park, in the management of the reserve and the preservation of their cultural heritage, by negotiating an Indigenous Land Use Agreement for the park.	High	Ongoing
Liaise with the DC of Elliston to ensure a cooperative approach to the provision, maintenance and design of existing and any proposed day and camping facilities at Walkers Rock or Talia Caves.	High	Ongoing
Investigate the possibility of a partnership agreement with the DC of Elliston for the provision and management of any low impact access, camping or day visitor facilities within the park.	High	12 months
Establish an effective communication network with the local community and stakeholders about park management issues.	High	Ongoing
Future Directions		
Additional Land		
Incorporate all Crown land along the beach of the park between High and Low Water Mark into the park to effectively manage the activities of visitors on the beach.	High	12 months

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APPENDIX A: Legislation, Conventions and Agreements

DEH is obliged to comply with the provisions of the following:

South Australia						
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Aboriginal Heritage Act 1988

Animal and Plant Control Act (Agricultural Protection and Other Purposes) 1986

Biological Control Act 1986

Catchment Water Management Act 1995

Coast Protection Act 1972

Country Fires Act 1989

Equal Opportunity Act 1984

Environment Protection Act 1993

Development Act 1993

Harbors and Navigation Act 1993

Heritage Act 1993

Historic Shipwrecks Act 1981

Mining Act 1971

National Trust of South Australia Act 1955

Native Title (South Australia) Act 1994

Native Vegetation Act 1991

Occupational Health, Safety and Welfare Act 1986

Petroleum Act 1940

Prevention of Cruelty to Animals Act 1985

Roads (Opening and Closing) Act 1991

Recreational Greenways Act 2000

Soil Conservation and Land Care Act 1989

Water Resources Act 1997

Wilderness Protection Act 1992

Commonwealth

Aboriginal and Torres Straight Islander Heritage Protection Act 1984

Disability Discrimination Act 1992

Environment Protection and Biodiversity Conservation Act 1999

Native Title Act 1993

Natural Heritage Trust Act 1996

International

Japan / China Australia Migratory Bird Agreements (JAMBA, CAMBA)

Ramsar Convention

World Heritage Convention

APPENDIX B: Land Tenure history

Lake Newland Conservation Park

Sections: Hundred of Colton: 54, 155, 201, 202, 203, 212

Sections: Hundred of Downer: 287 Allotment 10 of Deposited Plan 29068

Lake Newland Conservation Park was constituted in Gazette 1.8.1991, page 490.

The Hundred of Colton was proclaimed in Gazette 22.6.1876, pages 1182-83. The Hundred of Downer was proclaimed in Gazette 10.5.1883, pages 1625-26.

This table shows the historical tenure over the subject land.							
Section / Lot	Previously	Title / Crown Lease	Date Issues	Terminated			
54	section 54	OP 6565, CL 485/3	01/04/1901	28/01/1927			
155	section 155	OP 6565, CL 485/3	01/04/1901	28/01/1927			
201	part section A	OP 6565, CL 485/3	01/04/1901	28/01/1927			
202	part section B	OP 6565, CL 485/3	01/04/1901	28/01/1927			
203	part section B	OP 6565, CL 485/3	01/04/1901	28/01/1927			
212	part section B	OP 6565, CL 485/3	01/04/1901	28/01/1927			
287	section 287	Crown Land	01/04/1901	28/01/1927			
allotment 10	section D, part section A,B,C, section 198	OP 6565, CL 485/3, Crown Land	01/04/1901	28/01/1927			

