

Department for Environment and Heritage
Management Plan



Hanson Scrub Conservation Park
2006



Government
of South Australia

This plan of management was adopted on **2 July 2006** and was prepared pursuant to section 38 of the *National Parks and Wildlife Act 1972*.



Government of South Australia

Department for Environment
and Heritage

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FOREWORD

Hanson Scrub Conservation Park protects approximately 394 hectares of seasonally-inundated tea tree open heath with a thatching grass and shrub understorey in the Upper South East region of South Australia. The vegetation of the park is highly diverse, with over 100 different plant species having been identified. It is the core area of 1,945 hectares of remnant native vegetation and provides a refuge for local populations of native reptiles, amphibians, mammals and birds that need semi-permanent wetland habitat.

The plan defines objectives and strategies for the future management of this reserve and facilitates the development and implementation of high quality conservation programs. Many people have contributed to the development of this plan of management. Their interest and helpful suggestions are gratefully acknowledged.

I now formally adopt the plan of management for Hanson Scrub Conservation Park under the provisions of section 38 of the *National Parks and Wildlife Act 1972*. I encourage you to read the plan and appreciate the significant conservation values of this park.



HON GAIL GAGO MLC

MINISTER FOR ENVIRONMENT AND CONSERVATION



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ACKNOWLEDGEMENTS

The contributions made by members of the local South East community, particularly input from the Tatiara Aboriginal Community and the Kungari Aboriginal Heritage Association Inc, was very much appreciated.

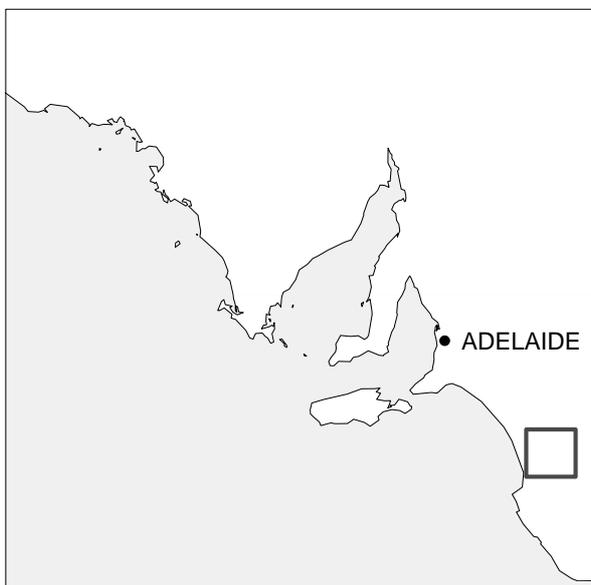
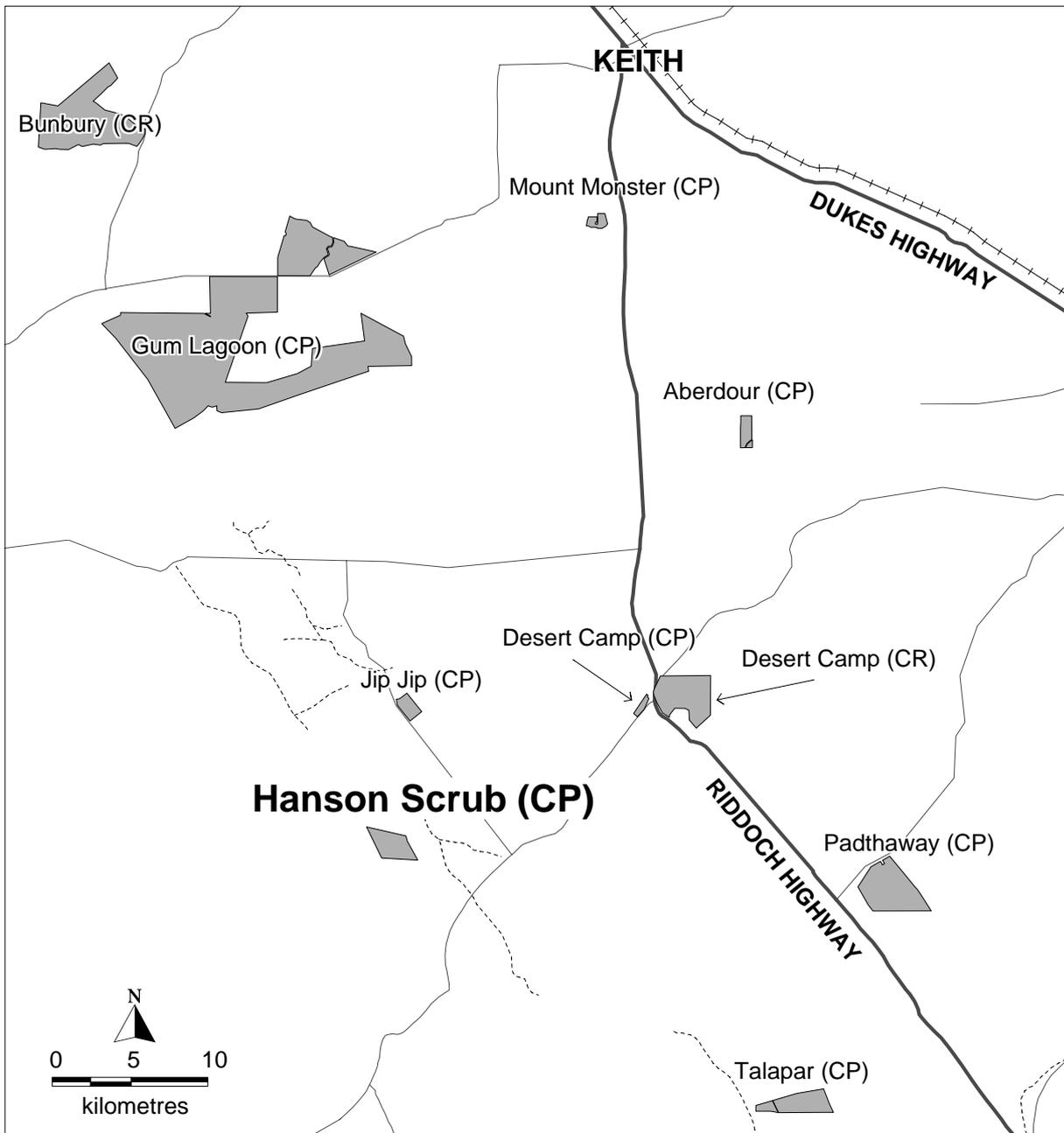
1 PARK LOCATION AND FEATURES

Hanson Scrub Conservation Park was proclaimed on 13 November 2003 under the *National Parks and Wildlife Act 1972* to conserve a small but significant area of remnant wetland vegetation in the Upper South East of South Australia. It complements some nearby areas of native vegetation and provides habitat for threatened bird species in a region that has been extensively cleared.

The 393.5 ha park is comprised of Allotment 1 in Deposited Plan 56651 (Hundred of Peacock). It is located between the Peacock and East Avenue Ranges on the mid Bakers Range Watercourse, about 50 km south of Keith (Figure 1). Hanson Scrub Conservation Park is traditionally associated with the Potaruwutj people (Tindale, 1974). The Tatiara Aboriginal Community and the Kungari Heritage Association Inc have both expressed interests in the park. There has been little to no involvement from the general public, with only the occasional local visitor.

The region experiences cool, wet winters and warm, dry summers. Hanson Scrub Conservation Park is a seasonally-wet heathland, which is recognised for having a high level of plant species diversity, with at least 104 species recorded within the park. This highly diverse heathland provides valuable habitat for avifauna of conservation significance, including five bird species rated as threatened at a state level, which have been identified within the local area. The previous landowners, who donated the land to the State, recognised the biodiversity value of the land and for some years prior to proclamation it was a private conservation Heritage Agreement area under the *Native Vegetation Act 1991*. The park environment remains in good condition and is relatively weed-free, although a "catch" drain constructed in the late 1990s could be adversely affecting some of the vegetation (Figure 2).

Major land uses in the region include grazing, viticulture and cropping. Other reserves in the area include Gum Lagoon and Jip Jip Conservation Parks to the north, Desert Camp Conservation Park and Conservation Reserve to the north-east, Padthaway Conservation Park to the east and Talapar Conservation Park to the south-east (Figure 1). All of these are some distance from Hanson Scrub. However, immediately to the north, the park adjoins the privately-owned Tiver Scrub (a Heritage Agreement area) and to the south and south-west lie two other areas of natural habitat (Figure 2). Beyond Tiver Scrub is the privately-owned "Watervalley" property, which includes extensive wetland areas along the Bakers Range Watercourse.



LEGEND

(CP)	Conservation Park	—	Road
(CR)	Conservation Reserve	+ + + +	Railway
■	State Parks and Reserves	- - - -	River/Creek
—	Main Road		

Figure 1
Hanson Scrub Conservation Park

Map designed and created by
Reserve Planning using PAMS
Projection: MGA Zone 54 (GDA 94)
Date: 14 February, 2005



LEGEND

- | | | | |
|---|--------------------------------|---|-------------|
|  | Hanson Scrub Conservation Park |  | 4WD Track |
|  | Heritage Agreement |  | Catch Drain |
|  | Land Parcels | | |

Figure 2

Hanson Scrub Conservation Park

Park Features

Map designed and created by
Reserve Planning using PAMS
Projection: MGA Zone 54 (GDA 94)
Date: 9 May, 2005

2 LEGISLATIVE FRAMEWORK

2.1 National Parks and Wildlife Act 1972

The Director of National Parks and Wildlife manages reserves subject to any direction by the Minister for Environment and Conservation or the Chief Executive of the Department for Environment and Heritage (DEH). When managing reserves, the Director is required under section 37 of the *National Parks and Wildlife Act 1972* to have regard to, and provide actions that are consistent with the following objectives of management 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 geographical, 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;
- generally, the promotion of the public interest; and
- preservation and protection of Aboriginal sites, features, objects and structures of spiritual or cultural significance within reserves.

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.

DEH is responsible for preparing management plans and undertaking the prescribed community consultation process. A standard management planning process is mandated, to ensure that all statutory obligations are met. Help and guidance with plan preparation is sought and obtained from individuals, community groups or relevant advisory committees, although ultimately the decision on whether or not to adopt a management plan remains a ministerial prerogative.

The draft plan for Hanson Scrub Conservation Park was released for public exhibition in February 2006. At the close of the comment period, two submissions were received, raising issues with regards to pest plant and animal control and park access. All comments and concerns were considered by the South East Consultative Committee and forwarded to the South Australian National Parks and Wildlife Council for advice before the plan was presented to the Minister for adoption.

In accordance with the Act, once formally adopted, the provisions of this plan must be carried out and no actions undertaken unless they are in accordance with the plan. In order to achieve this, each year park managers, taking regional and district priorities into account, draw up work programs to implement the strategies proposed in management plans. Implementation of these projects is determined by, and subject to, the availability of resources (eg staffing and funding).

2.2 Native Title Act 1993

Native Title describes the rights and interests Aboriginal and Torres Strait Islander People have in land and waters according to their traditional laws and customs. Commonwealth 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.

This management plan is released and will be adopted subject to any native title rights and interests that may continue to exist in relation to the land and/or waters. Before undertaking any acts that might affect native title, DEH will follow the relevant provisions of the *Native Title Act 1993*.

3 VISION

The vision for Hanson Scrub Conservation Park is a reserve that protects an area of seasonal wetland habitat in the Upper South East region and supports local populations of native reptiles, amphibians, mammals and birds, thereby contributing to conservation of regional biodiversity.

The primary values of the park are that it:

- protects part of a much larger area of important native vegetation with a high level of species diversity;
- provides seasonal wetland habitat, which is otherwise scarce in the local area; and
- contributes to the preservation of habitat for threatened flora and fauna.

The key threatening pressures to the park are:

- the "catch" drain, which influences the local hydrology, therefore vegetation community structures, species diversity and contributes to the introduction of pest plants;
- maintaining the low numbers of introduced plants and animals; and
- ensuring that visitors have minimal to no impact on the park's biodiversity values.

4 MANAGING NATURAL HERITAGE

4.1 Geology, Soils and Landform

The South East region is characterised by a series of low, parallel ridges (locally called “ranges”) extending inland from the coastline, formed when coastal dunes were stranded during successive changes in sea level. These consolidated dune ridges are covered with sandy soils of varying depth, with scattered outcrops of calcarenite.

The park lies in an interdunal swale between two calcarenite dune ridges and has an undulating, uniform topography. The interdunal swales are generally sandy but in places may exhibit clayey, impermeable soils. The primary geological formation underlying the park is Bridgewater Formation calcarenite. Early Ordovician granite of the Padthaway Ridge outcrops about 10 km to the north and 20 km to the south, suggesting that the Cambrian-Ordovician basement may be relatively shallow in this locality. This has implications for the occurrence of and accessibility to mineral resources (see Section 8.1 Exploration and Mining).

One implication for park managers is the need to take soil type into consideration when making decisions on track construction and maintenance. There is the possibility that seasonal inundation (in winter) or dry sand (in summer) may impede vehicular access at various times of the year. Activities that could cause soil erosion should be avoided.

Increasing soil salinity is a major issue of concern in the Upper South East and the “catch” drain through the park was intended to provide a drainage service for agricultural land to the east, while also preserving the wetland systems within the watercourse from salt deposition. When the “catch” drain was constructed, there was little indication of soil salinity problems in the immediate park area, but monitoring should continue to ascertain what, if any, changes are occurring over time. Park managers should work cooperatively with the local authorities who have responsibilities for soil conservation (eg South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board).

Objective

Conserve the soils within the park.

Strategies

- Consider the properties of the soils in the park when planning for park management activities.
- Implement soil rehabilitation programs to prevent and mitigate any existing or potential degradation.
- Work cooperatively with the South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board with regard to soil conservation measures.

4.2 Hydrology

The slow natural drainage pattern of the Upper South East region that prevailed in historic times (ie from south-east to north-west along the interdunal flats) has been substantially modified by the construction of an extensive system of drains. The long-term effects of artificial drainage on the Upper South East environment appear to have been quite significant, but the ecological changes are not completely understood.

The Upper South East Dryland Salinity and Flood Management Program spans the entire region and was the most recent streamflow/drainage system imposed (Upper South East Dryland Salinity and Flood Management Plan Steering Committee, 1993). The “catch” drain that bisects the park is a key component of the scheme and was constructed in 1998/99 (Figure 2). The South Eastern Water Conservation and Drainage Board is responsible for the ongoing management of the drainage system, which is intended to both relieve seasonal inundation as well as lower the water table and remove saline groundwater on a continuous basis year-round.

Hanson Scrub Conservation Park plays another key role in the Upper South East Dryland Salinity and Flood Management Scheme. To the west of the “catch” drain the park forms part of the watercourse flat for the Bakers Range Watercourse (majority of the surface run-off from the east flows into the “catch” drain), which is a key component of the Wetlands Waterlink Sub-program. The purpose of this sub-program is to restore the watercourse habitat linking Bool Lagoon and the

Coorong. The watercourse will be managed to receive surface water flows through the Adaptive Management Sub-program, another sub-program of the Upper South East Dryland Salinity and Flood Management Scheme. The Bakers Range Watercourse will be dependent on seasonal flows, typically three months winter/spring inundation in an average of three years out of five. The Drainage Board will take over the management of the Adaptive Management Sub-program upon the cessation of the Upper South East Dryland Salinity and Flood Management Scheme.

It must be noted that construction of the "catch" drain involved the clearance of native vegetation (approved by the Native Vegetation Council in 1998) along the drain easement, after which substantial areas of vegetation die-back have occurred. The exact cause of this die-back has not been established. It is believed that the drain's (intended) draw-down effect on the local watertable, combined with a number of below average rainfall years could be major contributing factors (Bachmann, 2001). Ongoing ecological work related to the impact of drains on native vegetation habitat in the Upper South East region has indicated that the interruption of surface flows caused by drainage channels, can have an equal if not greater impact than groundwater draw-down on nearby vegetation composition and structure. Therefore, the disruption and diversion of "cross-flat" flows that have resulted from the construction of the "catch" drain along the centre/east of the Bakers Range Flat, could also be one of the fundamental causes of vegetation die-back. It has also been suggested that the local vegetation could be in transition to a drier community type. Additionally, it could be expected that ecological stability might return after a period of adjustment to the new hydrological regime and the health of the park's vegetation is subject to an ongoing monitoring program (Native Vegetation Council, 1998).

The stated intent of the drain proponents was that the health of the native vegetation in the area and the existing hydrology would be maintained. Park managers should liaise with the South Eastern Water Conservation and Drainage Board to ensure that the commitments made at the time of construction of the "catch" drain, and particularly the associated vegetation clearance conditions, are strictly adhered to. This will involve the Drainage Board engaging pro-actively with landholders in the district to ensure their compliance with those conditions. Ongoing vegetation monitoring will indicate the need for any further remedial actions and additional measures that may be required.

Although the drain appears to have negatively impacted on the native vegetation in some areas of the park, the vegetation on the drain spoil-bank (along the western side of the "catch" drain) has recovered relatively well. The drain spoil-bank was constructed using a trial method to foster regeneration, which involved re-spreading topsoil on the bank after construction of the drain was complete. Monitoring of the bank continues and it is important that track maintenance and other management activities do not compromise this monitoring program.

Park managers can have little influence over the park's hydrology, given that drainage management is a regional initiative. However, it is still important for active liaison to be maintained with the responsible authorities in an effort to achieve the best outcome for local biodiversity conservation.

Objective

Conserve the park's natural hydrological systems and water-dependent ecosystems.

Strategies

- Monitor changes to ecosystems resulting from changes in hydrology management.
- Assist in the management of on-park hydrological issues and collaborate with neighbours regarding off-park hydrological activities.
- Minimise any possible adverse affects to biodiversity when undertaking remedial works in relation to hydrological issues.
- Liaise with the South Eastern Water Conservation and Drainage Board to ensure that the "catch" drain is operated and maintained such that it has a minimal impact on the park environment.
- Ensure management activities avoid compromising the regeneration-monitoring program of the drain spoil-bank.

- Participate in regional water management programs to ensure any hydrological management schemes are designed and implemented with minimal negative impacts to the park's hydrology and natural values.
- Support the involvement of research institutions and interested volunteers in the monitoring of rainfall, water quality, ecological processes, drainage and associated hydrological management programs.

4.3 Native Vegetation

Hanson Scrub Conservation Park is predominantly seasonally-inundated tea tree open heath with a thatching grass and shrub understorey. There are some small patches of mallee open scrub and banksia shrubland in the more elevated areas. The heath vegetation has a high level of plant species diversity, with 104 different native plant species recorded in the park. Two of these plant species, the Scented Sundew (*Drosera whittakeri* ssp. *aberrans*) and Cleland's Beard-heath (*Leucopogon clelandii*) are rated as rare under the *National Parks and Wildlife Act 1972*. A further six species have an identified conservation rating for the South East region.

The two dominant vegetation associations present in the park include Short-leaf Honey-myrtle (*Melaleuca brevifolia*), Swamp Paper-bark (*Melaleuca halmaturorum* ssp. *halmaturorum*) low shrubland and Thatching Grass (*Gahnia filum*) sedgeland, with some small areas of Broombush (*Melaleuca uncinata*), Coastal White Mallee (*Eucalyptus diversifolia*) and Desert Banksia (*Banksia ornata*) shrubland.

The park is the core area of a 1,945 ha expanse of remnant native vegetation. The northern boundary of the park abuts the "Tiver Scrub" Heritage Agreement area and two large tracts of uncleared native vegetation remain to the south (one abutting), one of which is also held under a Heritage Agreement, which are constituted under the *Native Vegetation Act 1991* (Figure 2).

Drainage works and dry seasons (presumably) have resulted in die-back of vegetation in the park, mainly Short-leaf Honey-myrtle and to a lesser extent Thatching Grass and Swamp Paper-bark. The goal of park managers should be to protect and aid the recovery of the wetland vegetation and thus maximise the value of what is now scarce habitat for wildlife in the Upper South East. A monitoring program has been established to observe changes in vegetative habitat and should be continued.

Phytophthora

Phytophthora is a generic name for a group of parasitic soil-borne root-rot fungi (most commonly *Phytophthora cinnamomi*) that cause disease and death in a range of native plant species. Phytophthora attacks the root system of a plant and reduces or stops the movement of water and nutrients; there is no cure for Phytophthora and once an area is infested it remains infested. The Australian Government Department of the Environment and Heritage has identified Phytophthora as a key threatening process and a National Threat Abatement Plan has been developed (Environment Australia, 2001).

The South East region is classified as being at Moderate Risk from the threat of Phytophthora (Phytophthora Technical Group, 2003). Although there is yet to be any confirmation of Phytophthora within the parks of the South East, many plant species within the region are known to be susceptible to the fungus (Phytophthora Technical Group, 2003). Additionally, the majority of the South East receives 400 mm or more average yearly rainfall, which is considered to be one of the aspects that puts the region at risk from Phytophthora. The fungus prefers moist, warm soils with a low to neutral pH, poor drainage and low nutrient concentrations (Phytophthora Technical Group, 2003). Phytophthora can be spread through transfer of infested soil material on vehicles or foot wear (DEH, 2002). It is highly important that the disease does not become established in the reserves of the South East region.

The clayey impermeable soils that can be found in Hanson Scrub Conservation Park, along with the high possibility of seasonal inundation occurring in the park and the consequent neutral to acidic pH of the soil, all contribute to creating an ideal environment for Phytophthora. The park protects a number of species that are susceptible to the fungus (DEH, 2002): Myrtle Wattle (*Acacia myrtifolia* var. *myrtifolia*); Silver Banksia (*Banksia marginata*); Desert Banksia (*Banksia ornata*); Leafless Bitter-Pea (*Daviesia brevifolia*); Common Heath (*Epacris impressa*); Brown Stringybark (*Eucalyptus baxteri*); Beaked Hakea (*Hakea rostrata*); Guinea-flower (*Hibbertia* spp.); Horny Cone-bush (*Isopogon certatophyllus*); and Tea-tree (*Leptospermum* spp.).

The possible threat of Phytophthora should always be kept in mind. Measures should be taken to prevent infected plant material entering the park. For example, prior to entering the park any vehicles that have been in infected areas should be washed down using a pressurised spray containing specialised disinfectants to prevent the spread of Phytophthora (DEH, 2002). The DEH *Standard Operating Procedures for Phytophthora Threat Management* (2002) should be referred to when undertaking management activities to create awareness of the precautions that need to be taken to avoid the introduction of Phytophthora.

Mundulla Yellows

Mundulla Yellows is a syndrome that affects eucalypts and other native plants, resulting in the death of the affected plants over several years. It is characterised by progressive yellowing and die-back of foliage and can look similar to lime-induced chlorosis or iron-induced chlorosis (leaf yellowing due to lime intolerant plants striking limestone). A great deal of research has been conducted into the cause of Mundulla Yellows. Numerous biotic causes have been suspected and were either unconfirmed or dismissed (Mundulla Yellows Task Group, 2004; Luck et al., 2004). The latest theory suggests that the symptoms of Mundulla Yellows are caused by a complex interaction of soil properties (texture and parent material), nutrients, soil compaction, water availability, increased alkalinity and salinity, and the accumulation of bicarbonate in the soil solution (Luck et al., 2004).

Mundulla Yellows symptoms are primarily recognised in trees that are situated along roadsides, natural and man-made watercourses, and sparsely separated trees in pastured paddocks (Croft et al., 1999). The following plant species recorded in Hanson Scrub Conservation Park have been diagnosed with Mundulla Yellows in the Upper South East region: Wattle (*Acacia* sp.); Bursaria (*Bursaria* sp.); Flax-lily (*Dianella* sp.); Eucalyptus (*Eucalyptus* sp.); Muntries (*Kunzea pomifera*); Tea-tree/Honey-myrtle (*Melaleuca* sp.); and Grass-tree (*Xanthorrhoea* sp.) (Mundulla Yellows Task Group, 2004). To date, none of the plants within the park have shown symptoms of Mundulla Yellows.

In an effort to keep Hanson Scrub Conservation Park free from Mundulla Yellows general plant hygiene guidelines for planting, pruning and disposal should be adhered to, as all of the factors that contribute to the syndrome are yet to be confirmed. The management and hygiene practices used for preventing the spread of Phytophthora should be employed, tools should be sterilised and cut material should not be removed from a site. Additionally, when revegetating local seed from trees that are not affected by Mundulla Yellows should be used for new plantings, rather than seedlings that have been raised in another area, since even if the plants appear healthy they could still be affected.

Objective

Restore, conserve and enhance the native vegetation in the park, particularly plants and communities of conservation significance.

Strategies

- Implement vegetation-monitoring programs with a particular focus on areas where there is significant degradation or understorey change. Encourage research into these observed changes and utilise the outcomes to guide management.
- Monitor the stability of plant species that are of conservation significance or those that provide habitat for threatened species and manage any threats to these species.
- Consider the threat of Mundulla Yellows and Phytophthora and take steps to prevent the introduction of either whenever practicable, report and investigate suspected infections, and treat whenever possible.

4.4 Native Fauna

Although there have not been any fauna surveys undertaken, it would be expected that the park is important for the long-term survival of a wide variety of reptiles, amphibians, mammals and birds that prefer semi-permanent wetland habitat. It is suspected that mammal species such as the Red-necked Wallaby (*Macropus rufogriseus*) and Western Grey Kangaroo (*Macropus fuliginosus*) could be found in the park since it protects habitat that is typically utilised by these species.

It is possible that the five threatened bird species that have been recorded in the local area also utilise the park. Each of these bird species has a state conservation rating under the *National Parks and Wildlife Act 1972*:

- Australian Shoveler (*Anas rhynchotis*) – rare;
- Brown Quail (*Coturnix ypsilophora*) – vulnerable;
- Latham’s Snipe (*Gallinago hardwickii*) – vulnerable;
- Slender-billed Thornbill (*Acanthiza iredalei hedleyi*) – vulnerable; and
- Southern Emu-wren (*Stipiturus malachurus intermedius*) – vulnerable.

In the interests of gaining more information, park managers should support any future biological surveys of the area. Fauna management activities in the park should be integrated with any broader-based recovery programs for threatened species and a regional perspective should be taken when maintaining the park as habitat for native fauna.

Objective

Identify and protect native fauna inhabiting or using the park.

Strategies

- Survey and monitor the number of native fauna species found in the park.
- Identify and protect significant fauna habitats and integrate habitat restoration with revegetation efforts and introduced plant management programs.
- Encourage approved volunteer groups and individuals to conduct fauna surveys and undertake population monitoring and management activities. Encourage surveys focussed on fauna species not yet recorded in the park and determine the habitat requirements of any new species sighted.
- Undertake on-park biodiversity conservation projects in association with threatened species recovery programs.

4.5 Introduced Plants

The park’s vegetation is generally in good condition and is relatively weed-free. Thistle (*Carduus* sp.) and Stinkwort (*Dittrichia graveolens*) were the only introduced plants of prominence seen during an inspection in February 2005. However, these species were present at a low level of infestation, and were located along the “catch” drain, which suggests this may have been how they were introduced into the park. Bridal Creeper (*Asparagus asparagoides*) has been sighted within the park along the eastern boundary by members of the Native Orchid Society of South Australia. A more thorough survey would be likely to reveal other types of pest plants within Hanson Scrub Conservation Park, such as African Boxthorn (*Lycium ferocissimum*), which was observed on adjoining land.

To effectively manage the threat of weed invasion, a regionally-integrated approach needs to be taken, involving surrounding property owners/managers, the Kingston District Council, the South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board, the latter being responsible for the “catch” drain easement.

Weed control should be coordinated according to priorities identified in any internal DEH district pest plant management programs and should recognise the legal requirements of the *Natural Resources Management Act 2004*.

Objective

Control and if possible eliminate proclaimed plants and minimise the adverse impacts of introduced plant species on the park’s biodiversity.

Strategies

- Develop partnerships with local land managers, such as the Kingston District Council, the South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board, and contribute to integrated regional weed control programs.
- Establish pest plant control priorities and actions, and coordinate weed control activities on the park with any pest plant control/native plant revegetation initiatives taking place on neighbouring land.

4.6 Introduced Animals

Casual observation would suggest that currently (2006) Hanson Scrub Conservation Park has relatively low numbers of the European Rabbit (*Oryctolagus cuniculus*), Red Fox (*Vulpes vulpes*) and Brown Hare (*Lepus capensis*). There has also been evidence of feral deer causing damage to native vegetation within the park. A more detailed mammal survey would be likely to reveal the presence of other introduced animal species. Rabbits, hares and deer are all introduced grazing animals that impact adversely on the natural environment. Introduced predators such as foxes have had and continue to have a considerable impact on native fauna, especially ground-frequenting birds, small mammals and reptiles.

Careful management through integrated pest control programs is the most effective way to ensure that pest animal numbers are reduced with minimal impact on native flora and fauna, until a long-term biological control alternative is found. From a DEH perspective, the current situation at Hanson Scrub Conservation Park does not warrant immediate plans for introduced animal control but any control activities undertaken in the future should be integrated with district-wide programs. As is the case for introduced plants, park managers should if at all possible, integrate their activities with those of neighbouring property managers.

Objective

Control introduced animal populations in the park, preferably as a component of regional programs.

Strategies

- Devise introduced animal control programs in accordance with regional priorities.
- Work in cooperation with adjoining landowners, the South East Natural Resources Management Board and the Kingston District Council to achieve effective pest animal control on a regional basis.

5 MANAGING FIRE

Based on the information available, Hanson Scrub Conservation Park has not experienced a fire in the last 75 years, however prior to this the fire history of the park is unknown. A fire management plan will be prepared that addresses fire management for the park. The fire management zones designated within this fire management plan will be consistent with the primary purpose of conserving the biodiversity values of the park.

Access for fire-fighting purposes in Hanson Scrub Conservation Park can currently be obtained from the boundary access tracks, from adjoining properties and along the "catch" drain easement through the centre of the park (Figure 2). The South Eastern Water Conservation and Drainage Board maintains the "catch" drain easement and liaison with this authority should take place regarding maintenance of the tracks along the drain that could be used by fire-fighting vehicles.

The need to construct any additional vehicle access tracks in the park will be determined through the fire management planning process. However, if fire management measures are required prior to the preparation of the fire management plan, these measures will be considered if they are necessary for the protection of native habitat or public safety.

Until a fire management plan is prepared, applied fire (ie ecological burning) will only be used if the benefits of such a practice are justified upon the basis of scientific principles and if it is required for reducing fuel hazards. Any bushfires should be suppressed as soon as practicable, due to the park's relatively small size.

The fire management plan will be prepared in consultation with adjoining Country Fire Service (CFS) Groups and the District Bushfire Prevention Committee, in order to integrate it with fire management in the district. Stakeholders and the wider community will also be consulted to ensure an understanding of the fire risks and mitigating actions being proposed or undertaken in the park.

Fire management planning will:

- identify natural and cultural heritage values and built assets;
- provide a framework for the management of bushfire suppression, including identification of fire management zones, strategic access and control lines;
- undertake an ecological assessment of the park to provide a framework for prescribed burning if required to assist with ecological management and fuel reduction; and
- identify performance indicators.

Objective

Manage fire to ensure the protection of life and property, the maintenance of biodiversity and the protection of natural, cultural and built values.

Strategies

- Develop, implement and review the fire management plan for the park in association with the CFS and other stakeholders.
- Continue to work with the relevant District Bushfire Prevention Committee and the CFS to minimise risk to life and property within and surrounding the park.
- Maintain boundary access and liaise with the South Eastern Water Conservation and Drainage Board regarding access along the "catch" drain easement.
- Suppress all bushfires within the park as soon as practicable.
- Until a fire management plan is prepared:
 - maintain existing fire tracks and only create new tracks or firebreaks if there are no other alternatives that can be used to protect native habitat or for ensuring public safety; and
 - only use applied fire as a management tool if it would be beneficial according to sound scientific principles and is required for fuel reduction purposes.

6 MANAGING CULTURAL HERITAGE

6.1 Indigenous Heritage

The land comprising Hanson Scrub Conservation Park is traditionally associated with the Potaruwutj people (Tindale, 1974). For Aboriginal people, land and waters have many interconnected complex meanings and values. The significance of land and waters is central to their lives: at birth, death, ceremonies and socially, whilst hunting, gathering, camping, and travelling.

Following colonial settlement, Aboriginal populations were substantially reduced as a result of introduced diseases, dispersal, dispossession of their land and water supplies, and sometimes through violent conflict.

The Potaruwutj people had a unique culture and language. Some of the language and traditional stories have been recorded. The full extent of Aboriginal heritage at Hanson Scrub Conservation Park has not been comprehensively researched.

However, due to historical or cultural reasons, any knowledge of the cultural heritage of the region may be privileged to selected Aboriginal people and therefore unable to be recorded. Given the lack of existing information, it is considered important that further research be undertaken in order to gain a better understanding of the Aboriginal occupancy and use of the area to identify any Aboriginal sites, objects and remains.

Aboriginal Heritage Act 1988

The purpose of the *Aboriginal Heritage Act 1988* is to protect and preserve Aboriginal sites, objects and remains. "Aboriginal site" and "Aboriginal object" are defined to mean an area of land or an object that is of significance according to Aboriginal tradition or that is of significance to Aboriginal archaeology, anthropology or history. The Department for Aboriginal Affairs and Reconciliation (DAARE) maintains a Central Archive, including the Register of Aboriginal Sites and Objects.

There are no sites listed on the Central Archive for Hanson Scrub Conservation Park. However, no comprehensive survey of the park has been undertaken and there may be unidentified Aboriginal sites, objects or remains in the park. In carrying out the activities and strategies envisaged in this plan, DEH will ensure that it complies with the *Aboriginal Heritage Act 1988*.

Objective

Ensure that any Aboriginal sites, objects and remains are protected and preserved in accordance with the *Aboriginal Heritage Act 1988*.

Strategies

- Consult with the Tatiara Aboriginal Community, the Kungari Heritage Association Inc and any other relevant Aboriginal people in decisions regarding the management of Aboriginal heritage.
- Identify and protect any Aboriginal sites, objects and remains in cooperation with the traditional owners, DAARE and relevant authorities.
- In consultation with the traditional owners, submit cultural sites and stories that relate to the park for inclusion on the DAARE Central Archive.

7 MANAGING TOURISM AND RECREATION

7.1 Visitor Use and Access

Few visitors come to the park at present (2006). From time to time local people with an interest in nature observation, research scientists and staff of the South Eastern Water Conservation and Drainage Board may visit the park.

The current pattern of low-key use is compatible with the primary role of the park for biodiversity conservation and the people who do come to the park are self-sufficient. Consequently there is no immediate demand or requirement for visitor facilities and none are planned for the term of this management plan.

A strong position should be maintained to ensure that visitor facilities are not required in the future. If the level of visitor use threatens the conservation values of the reserve, additional management actions may be required to further limit vehicle or pedestrian access. The park should not be actively promoted consistent with this proposed level of access.

The park can be accessed from the Hirsts Summer Track on the southern boundary, although access during winter may prove more challenging (Figure 2). Visitors with adequate 4WD vehicles can access the boundary tracks and "through-track" alongside the "catch" drain at most times of the year (Figure 2). It should be noted that the "through-track" becomes impassable during wet winter seasons. Some members of the public use this "through-track" and currently this is not causing any management issues (2006). For the majority of the park, the only access is by foot, although there are no walking trails as such. Given the low numbers of visitors no additional access will be provided during the term of this management plan.

Objectives

Ensure that visitors have a minimal impact on the park environment and respect the park's primary role for biodiversity conservation.

Provide visitor access to the park without compromising park values.

Strategies

- Manage the park for low-key visitor use without the requirement for the development of facilities.
- Ensure that the "through-track" alongside the "catch" drain is restricted to management vehicles only.
- Maintain current boundary access tracks to 4WD standards.

7.2 Commercial Tourism

There has been no interest shown in this park by any commercial tour operator to date (2006). If there are such proposals in the future that were for the purposes of gaining fee or reward, tour operators would need to hold the requisite Commercial Users Licence and conduct their activities in a manner that respected park values and recognised the intention not to promote the reserve for increased visitation. Proposed tour activities need to be agreed to (with DEH park managers) prior to the issue of any licence, to ensure that they are in accordance with the principles in this management plan.

Objective

Ensure any commercial tourism undertaken on the park has minimal impact on its natural values and makes an appropriate financial contribution to management.

Strategies

- Consider any requests to allow private sector or other parties to undertake commercial tourism ventures on the park.
- Issue Commercial User Licences for appropriate use of the park by tour operators if proposed activities are consistent with the objectives of this management plan.

8 MANAGING RESOURCE USE

8.1 Exploration and Mining

Hanson Scrub Conservation Park was proclaimed subject to existing and future rights for exploration and mining, for both minerals and petroleum, under the *Mining Act 1971* and the *Petroleum Act 2000* (see Appendix B for the park proclamation).

The park proclamation is quite detailed as to the requirements that must be met by licence holders who wish to access the area. Exploration and mining rights are restricted to the land that lies below the natural surface of the park; no access is permitted on the surface of the park. Therefore, sub-surface exploration of the park could be conducted via airborne geophysical surveys or directional drilling methods from outside the park. Additionally, any mining of the park's sub-surface would have to be undertaken without access to the natural surface of the park and would also involve directional drilling methods from adjacent land as long as all of the other conditions of the proclamation are met.

The South East region is seen as being prospective for petroleum (primarily coal bed methane), coal, gold base metals and other minerals.

Park managers should continue to liaise with Primary Industries and Resources South Australia (PIRSA) and with any mining companies or exploration licence holders operating in the region, particularly when proposals are made to undertake exploration or mining works in the near vicinity of the park. Even though no surface work is permitted, mining could cause changes to the surrounding countryside or the watertable, which may have a detrimental impact on the park's environment.

Objective

Ensure that petroleum and mineral exploration and any subsequent extraction is conducted in a manner that does not intrude upon or adversely impact the natural values of the park.

Strategy

- Maintain effective liaison with PIRSA officials and the proponents of petroleum and mineral exploration and extraction activities on adjoining land.

9 INVOLVING THE COMMUNITY

Friends and Volunteers

Volunteer support and community-based involvement that conserves and improves biodiversity and cultural values (while achieving effective management of recreational use) has become an essential component of park management. DEH acknowledges and supports the active volunteer contribution of the various Friends of Parks groups towards the good management of parks throughout the state. At this stage however (2006) there is no Friends of Parks group involved with Hanson Scrub Conservation Park.

If and when a Friends of Parks group becomes involved, it is important that DEH district and regional staff maintain effective communication with any volunteers to ensure that any work done in the park is in accordance with this management plan. Staff should provide volunteers with legal and policy advice, technical support, planning advice and an overall management direction, with regards to the work volunteers do in the park. Involvement in the park by other conservation based organisations, scientists and researchers from tertiary institutions and by staff and students from schools should also be supported and encouraged.

Regional Communities, Non-government Organisations and Park Neighbours

DEH supports and promotes partnerships and cooperative management arrangements to establish integrated natural resource management. This requires the development of effective working relationships with government agencies, local authorities, non-government organisations and the local community, particularly park neighbours. Integrating park management with those programs being undertaken by the owners of adjacent vegetated land should be supported, as should any involvement that researchers from tertiary institutions and staff and students from local schools have with the park.

With regard to Hanson Scrub Conservation Park, this involves forging management links with the Kingston District Council, the South East Natural Resources Management Board, the immediate park neighbours and community stakeholders generally. The park falls into the area covered by the South East Consultative Committee and the members of that committee have been involved with the park from its inception. There is also the need for effective liaison with the South Eastern Water Conservation and Drainage Board (see Section 4.2 Hydrology).

Partnership arrangements should be developed to provide a positive direction for the shared development and management of the park to fulfil the objectives of this plan. Moreover, with the likelihood that landuse will change within the region, it is important for DEH to actively work with the Kingston District Council and development bodies to ensure proposed developments do not adversely impact on biodiversity conservation and park values.

The park is currently located within the Primary Industry Zone of the Development Plan for the Kingston District Council, most recently consolidated in 2005 (Kingston District Council, 2005). Aside from the key objective of the long-term sustainability of primary industries, this zone has objectives that acknowledge the need to conserve and maintain biodiversity in areas of existing native vegetation (Kingston District Council, 2005). Although the use of land for conservation purposes is allowed for within this zone it is still the recommendation of this plan that the park and surrounding areas of native vegetation (ie the entire 1,945 ha block) be included in the Conservation Zone area of the Kingston District Council when the development plan is next revised.

Aboriginal Partnerships

DEH is committed to reconciliation and to the development of partnerships with Aboriginal people who may be associated with the park area, including the Tatiara Aboriginal Community and the Kungari Heritage Association Inc, to ensure that the park is managed in a way that respects contemporary and traditional culture, knowledge and skills.

A survey is yet to be conducted to establish Indigenous heritage values and a partnership with the appropriate Aboriginal representatives needs to be developed. However, if such a partnership were developed for Hanson Scrub Conservation Park, it might involve the delivery of programs that promoted reconciliation, cultural awareness, Indigenous employment and training, and Indigenous cultural heritage management.

Objective

Maintain cooperative working relationships that contribute to the conservation of park biodiversity.

Strategies

- Encourage and contribute to the development of partnership arrangements with organisations that have an interest in contributing to the sustainable management of the park.
- Continue to work with the Kingston District Council and other local agencies to explore the benefits of partnership arrangements to deal with issues of common interest and to best integrate biodiversity management in the region.
- Ensure that the Kingston District Council considers re-zoning the park and contiguous areas of vegetation to a "Conservation Zone" when the Kingston District Council Development Plan is next revised.
- Build ongoing partnerships with Aboriginal groups to support the future management of Hanson Scrub Conservation Park.

SUMMARY OF MANAGEMENT STRATEGIES

MANAGING NATURAL HERITAGE
<p>Geology, Soils and Landform</p> <ul style="list-style-type: none"> • Consider the properties of the soils in the park when planning for park management activities. • Implement soil rehabilitation programs to prevent and mitigate any existing or potential degradation. • Work cooperatively with the South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board with regard to soil conservation measures.
<p>Hydrology</p> <ul style="list-style-type: none"> • Monitor changes to ecosystems resulting from changes in hydrology management. • Assist in the management of on-park hydrological issues and collaborate with neighbours regarding off-park hydrological activities. • Minimise any possible adverse affects to biodiversity when undertaking remedial works in relation to hydrological issues. • Liaise with the South Eastern Water Conservation and Drainage Board to ensure that the “catch” drain is operated and maintained such that it has a minimal impact on the park environment. • Ensure management activities avoid compromising the regeneration-monitoring program of the drain spoil-bank.
<p>Native Vegetation</p> <ul style="list-style-type: none"> • Implement vegetation-monitoring programs with a particular focus on areas where there is significant degradation or understorey change. Encourage research into these observed changes and utilise the outcomes to guide management. • Monitor the stability of plant species that are of conservation significance or those that provide habitat for threatened species and manage any threats to these species. • Consider the threat of Mundulla Yellows and Phytophthora and take steps to prevent the introduction of either whenever practicable, report and investigate suspected infections, and treat whenever possible.
<p>Native Fauna</p> <ul style="list-style-type: none"> • Survey and monitor the number of native fauna species found in the park. • Identify and protect significant fauna habitats and integrate habitat restoration with revegetation efforts and introduced plant management programs. • Encourage approved volunteer groups and individuals to conduct fauna surveys and undertake population monitoring and management activities. Encourage surveys focussed on fauna species not yet recorded in the park and determine the habitat requirements of any new species sighted. • Undertake on-park biodiversity conservation projects in association with threatened species recovery programs.

Introduced Plants
<ul style="list-style-type: none"> • Develop partnerships with local land managers, such as the Kingston District Council, the South East Natural Resources Management Board and the South Eastern Water Conservation and Drainage Board, and contribute to integrated regional weed control programs. • Establish pest plant control priorities and actions, and coordinate weed control activities on the park with any pest plant control/native plant revegetation initiatives taking place on neighbouring land.
Introduced Animals
<ul style="list-style-type: none"> • Devise introduced animal control programs in accordance with regional priorities. • Work in cooperation with adjoining landowners, the South East Natural Resources Management Board and the Kingston District Council to achieve effective pest animal control on a regional basis.
MANAGING FIRE
<ul style="list-style-type: none"> • Develop, implement and review the fire management plan for the park in association with the CFS and other stakeholders. • Continue to work with the relevant District Bushfire Prevention Committee and the CFS to minimise risk to life and property within and surrounding the park. • Maintain boundary access and liaise with the South Eastern Water Conservation and Drainage Board regarding access along the “catch” drain easement. • Suppress all bushfires within the park as soon as practicable. • Until a fire management plan is prepared: <ul style="list-style-type: none"> - maintain existing fire tracks and only create new tracks or firebreaks if there are no other alternatives that can be used to protect native habitat or for ensuring public safety; and - only use applied fire as a management tool if it would be beneficial according to sound scientific principles and is required for fuel reduction purposes.
MANAGING CULTURAL HERITAGE
Indigenous Heritage
<ul style="list-style-type: none"> • Consult with the Tatiara Aboriginal Community, the Kungari Heritage Association Inc and any other relevant Aboriginal people in decisions regarding the management of Aboriginal heritage. • Identify and protect any Aboriginal sites, objects and remains in cooperation with the traditional owners, DAARE and relevant authorities. • In consultation with the traditional owners, submit cultural sites and stories that relate to the park for inclusion on the DAARE Central Archive.
MANAGING TOURISM AND RECREATION
Visitor Use and Access
<ul style="list-style-type: none"> • Manage the park for low-key visitor use without the requirement for the development of facilities. • Ensure that the “through-track” alongside the “catch” drain is restricted to management vehicles only. • Maintain current boundary access tracks to 4WD standards.

Commercial Tourism
<ul style="list-style-type: none"> • Consider any requests to allow private sector or other parties to undertake commercial tourism ventures on the park. • Issue Commercial User Licences for appropriate use of the park by tour operators if proposed activities are consistent with the objectives of this management plan.
MANAGING RESOURCE USE
Exploration and Mining
<ul style="list-style-type: none"> • Maintain effective liaison with PIRSA officials and the proponents of petroleum and mineral exploration and extraction activities on adjoining land.
INVOLVING THE COMMUNITY
<ul style="list-style-type: none"> • Encourage and contribute to the development of partnership arrangements with organisations that have an interest in contributing to the sustainable management of the park. • Continue to work with the Kingston District Council and other local agencies to explore the benefits of partnership arrangements to deal with issues of common interest and to best integrate biodiversity management in the region. • Ensure that the Kingston District Council considers re-zoning the park and contiguous areas of vegetation to a "Conservation Zone" when the Kingston District Council Development Plan is next revised. • Build ongoing partnerships with Aboriginal groups to support the future management of Hanson Scrub Conservation Park.

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APPENDIX A: CONSERVATION STATUS CODES

Australian Conservation Status Codes

The following codes are based on the current listing of species under Section 179 of the *Environment Protection and Biodiversity Conservation Act 1999*.

- EX Extinct:** there is no reasonable doubt that the last member of the species has died.
- EW Extinct in the Wild:** known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CE Critically Endangered:** facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- E Endangered:** facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- V Vulnerable:** facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD Conservation Dependent:** the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

Note: Prescribed criteria as defined under the IUCN Red List of Threatened Species.

South Australian Conservation Status Codes

The following codes are based on the current listing of species under Schedules of the *National Parks and Wildlife Act 1972*, as amended in 2000.

- E Endangered:** (Schedule 7) in danger of becoming extinct in the wild.
- V Vulnerable:** (Schedule 8) at risk from potential or long term threats which could cause the species to become endangered in the future.
- R Rare:** (Schedule 9) 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.

Regional Status Codes

The categories below apply to the species distribution at a regional level.

Mammals, Reptiles & Amphibians

There are no regional conservation status categories developed for mammals, reptiles or amphibians to date (2004).

Birds

Regional conservation status for birds follows Carpenter and Reid (1998) *The Status of Native Birds in the Agricultural Areas of South Australia*.

The regions are defined as follows:

ML	Mount Lofty	MN	Mid-North	SE	South-Eastern	KI	Kangaroo Island
MM	Murray Mallee	EP	Eyre Peninsula	YP	Yorke Peninsula		

Plants

Regional conservation ratings for plants follow:

- Lang, P. J. & Kraehenbuehl, D. N. (2001) *Plants of Particular Conservation Significance in South Australia's Agricultural Regions*.
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The regions are as defined by the State Herbarium (Plant Biodiversity Centre), illustrated in the back cover of *Census of South Australian Vascular Plants (Edition V)* (Eds. Barker, B., Barker, R., Jessop, J. and Vonow, H. (2005)).

NW	North-Western	FR	Flinders Ranges	NL	Northern Lofty	SL	Southern Lofty
LE	Lake Eyre	EA	Eastern	MU	Murray	KI	Kangaroo Island
NU	Nullarbor	EP	Eyre Peninsula	YP	Yorke Peninsula	SE	South-Eastern
GT	Gairdner-Torrens						

In order of decreasing conservation significance:

- X Extinct/Presumed extinct:** not located despite thorough searching of all known and likely habitats; known to have been eliminated by the loss of localised population(s); or not recorded for more than 50 years from an area where substantial habitat modification has occurred.
- E Endangered:** rare and in danger of becoming extinct in the wild.
- T Threatened:** (*Plants only*) likely to be either endangered or vulnerable but insufficient data available for more precise assessment.
- V Vulnerable:** rare and at risk from potential threats or long term threats that could cause the species to become endangered in the future.
- K Uncertain:** likely to be either threatened or rare but insufficient data available for a more precise assessment.
- R Rare:** has a 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 or widespread 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.
- Q Not yet assessed:** but flagged as being of possible significance.
- N Not of particular significance:** (*Plants only*) Also indicated by a blank entry.
- C Common:** (*Birds only*) Also indicated by a blank entry.
- O Occasional Visitor Only:** (*Birds only*) Not considered of conservational status.

APPENDIX B: GOVERNMENT GAZETTE NOTICE FOR HANSON SCRUB CONSERVATION PARK (MINING RIGHTS) PROCLAMATION

[13 November 2003] THE SOUTH AUSTRALIAN GOVERNMENT GAZETTE

4049

South Australia

National Parks and Wildlife (Hanson Scrub Conservation Park—Mining Rights) Proclamation 2003

Under section 43 of the *National Parks and Wildlife Act 1972*

Preamble

- 1 The Crown land described in Schedule 1 is, by another proclamation made on this day, constituted as a conservation park under section 30(1) of the *National Parks and Wildlife Act 1972* and assigned the name *Hanson Scrub Conservation Park*.
- 2 It is intended that, by this proclamation, certain existing and future rights of entry, prospecting, exploration or mining be preserved in relation to the land constituting the conservation park.
- 3 It is also intended that the exercise of those rights be restricted to the land that lies below the surface of the park, with no work permitted on the park surface and any necessary subsurface exploration or access undertaken in a manner (eg from adjacent land) that does not require such work.

1—Short title

This proclamation may be cited as the *National Parks and Wildlife (Hanson Scrub Conservation Park—Mining Rights) Proclamation 2003*.

2—Commencement

This proclamation comes into operation on the day on which it is made.

3—Existing rights continue

Subject to clause 5, existing rights of entry, prospecting, exploration or mining under the *Mining Act 1971* or the *Petroleum Act 2000* may continue to be exercised in respect of the land described in Schedule 1.

4—New rights may be acquired

Subject to clause 5, rights of entry, prospecting, exploration or mining may, with the approval of the Minister for Mineral Resources Development and the Minister for Environment and Conservation, be acquired pursuant to the *Mining Act 1971* or the *Petroleum Act 2000* in respect of the land described in Schedule 1.

5—Conditions subject to which rights may be exercised

A person in whom rights of entry, prospecting, exploration or mining are vested pursuant to the *Mining Act 1971* or the *Petroleum Act 2000* (whether those rights were acquired before or after the making of this proclamation) must not exercise those rights in respect of the land described in Schedule 1 unless the person complies with the following conditions:

- (a) no work may be carried out on the surface of the land in the exercise of those rights;
- (b) if work to be carried out in relation to the land in the exercise of rights under the *Petroleum Act 2000* is a regulated activity within the meaning of that Act, the person must ensure that—
 - (i) the work is not carried out until a statement of environmental objectives in relation to the activity that has been approved under that Act has also been approved by the Minister for Environment and Conservation; and
 - (ii) the work is carried out in accordance with the statement as so approved;
- (c) if work to be carried out in relation to the land in the exercise of rights under the *Mining Act 1971* or the *Petroleum Act 2000* has not previously been authorised (whether by inclusion in an approved statement of environmental objectives referred to in paragraph (b) or otherwise), the person must give at least 3 months notice of that proposed work to the Minister for Mineral Resources Development and the Minister for Environment and Conservation and supply each Minister with such information in relation to the proposed work as the Minister may require;
- (d) if directions are agreed upon by the Minister for Mineral Resources Development and the Minister for Environment and Conservation and given to the person in writing in relation to—
 - (i) carrying out work in relation to the land in a manner that minimises damage to the land (including the land's vegetation and wildlife) and the environment generally; or
 - (ii) preserving objects, structures or sites of historical, scientific or cultural interest; or
 - (iii) rehabilitating the land (including the land's vegetation and wildlife) on completion of the work; or
 - (iv) (where the work is being carried out in the exercise of rights acquired after the making of this proclamation) prohibiting or restricting access to any specified area of the land that the Ministers believe would suffer significant detriment as a result of carrying out the work,

(being directions that do not reduce or otherwise detract from any requirement in respect of any of those matters contained in an approved statement of environmental objectives referred to in paragraph (b)), the person must comply with those directions in carrying out the work;
- (e) if a plan of management is in operation under section 38 of the *National Parks and Wildlife Act 1972* in respect of the land, the person must have regard to the provisions of the plan of management;

- (f) in addition to complying with the other requirements of this proclamation, the person—
 - (i) must take such steps as are reasonably necessary to ensure that objects, structures and sites of historical, scientific or cultural interest and the land's vegetation and wildlife are not unduly affected by any work; and
 - (ii) must, upon the completion of any work, obliterate or remove all installations and structures (other than installations and structures designated by the Minister for Mineral Resources Development and the Minister for Environment and Conservation as suitable for retention) used exclusively for the purposes of the work;
- (g) if no direction has been given by the Minister for Mineral Resources Development and the Minister for Environment and Conservation under paragraph (d)(iii), the person must (in addition to complying with any approved statement of environmental objectives referred to in paragraph (b)) rehabilitate the land (including the land's vegetation and wildlife) on completion of the work to the satisfaction of the Minister for Environment and Conservation.

6—Governor may give approvals, directions

If—

- (a) the Minister for Mineral Resources Development and the Minister for Environment and Conservation cannot agree as to whether—
 - (i) approval should be granted or refused under clause 4; or
 - (ii) a direction should be given under clause 5(d); or
- (b) the Minister for Environment and Conservation does not approve a statement of environmental objectives referred to in clause 5(b),

the Governor may, with the advice and consent of the Executive Council—

- (c) grant or refuse the necessary approval under clause 4 or 5(b); or
- (d) give a direction in writing under clause 5(d).

Schedule 1—Description of land

Allotment 1 of DP 56651, Hundred of Peacock, County of MacDonnell.

Made by the Governor

with the advice and consent of the Executive Council

on 13 November 2003.

EC03/0085CS

South Australia

National Parks and Wildlife (Hanson Scrub Conservation Park) Proclamation 2003

under section 30(1) of the *National Parks and Wildlife Act 1972*

1—Short title

This proclamation may be cited as the *National Parks and Wildlife (Hanson Scrub Conservation Park) Proclamation 2003*.

2—Commencement

This proclamation comes into operation on the day on which it is made.

3—Constitution of Hanson Scrub Conservation Park

The following Crown land is constituted as a conservation park and assigned the name *Hanson Scrub Conservation Park*:

Allotment 1 of DP 56651, Hundred of Peacock, County of MacDonnell.

Made by the Governor

being of the opinion that the Crown land described in clause 3 should be protected and preserved for the purposes of conserving any wildlife and the natural features of the land and with the advice and consent of the Executive Council

on 13 November 2003.

EC03/0085CS