Parks of the Central Fleurieu Peninsula

Management Plan 2023

SOUTH AUSTRALIA

Government of South Australia
Department for Environment and Water

Minister's foreword

The parks of the central Fleurieu Peninsula protect a network of almost 3,000 hectares of diverse and scenic landscapes including high rainfall forest, woodlands, heath and significant areas of nationally critically endangered Fleurieu Peninsula Swamps. The proclamation of Hindmarsh Valley National Park in 2021 added one of the area's most biologically significant sites to the state's protected area network. It was also the driver for the development of this management plan.

The range and diversity of native plants and animals within the parks is outstanding. Many of the species are threatened at the national and state level, including a number of species endemic to the area. The plan aims to conserve these values by managing the key threats and continuing to build understanding of ecological health and the impacts of a changing climate. Opportunities for low-impact activities enable visitors to experience the stunning natural beauty of the parks.

I acknowledge the community involvement in management of these parks and also the contributions from those who helped in the development of the plan. I now formally adopt the Parks of the Central Fleurieu Peninsula Management Plan under section 38 of the *National Parks and Wildlife Act 1972*.

Hon Susan Close MP
Minister for Climate, Environment and Water

Acknowledgement of Country

The Department for Environment and Water acknowledges First Nations peoples as the traditional custodians of the lands we live and work upon and pays respect to Elders past and present. The department also acknowledges and respects the deep spiritual connection that First Nations people have to Country and that cultural and heritage beliefs continue to be just as important to living First Nations people today.

Developing this draft plan

The Parks of the Central Fleurieu Peninsula Management Plan has been developed following the proclamation of Hindmarsh Valley National Park in December 2021.

The strategic management, objectives, and strategies outlined in this plan have been developed by the Department for Environment and Water with input from First Nations peoples, key stakeholders, park managers and technical experts.

Further community input was sought through public consultation of a draft management plan as required under the *National Parks and Wildlife Act 1972*. Feedback from 74 submissions on the draft plan helped in the finalisation of this plan.

The parks in this plan have similar ecological and geographic features and are subject to the same range of issues. Establishing one management plan supports a consistent approach to biodiversity conservation and public visitation across these parks.

This is the first adopted management plan for each of the parks except Stipiturus Conservation Park, where it will replace the Stipiturus Conservation Park Management Plan (DEH, 2007).

Contents

Directions for management

The parks of the central Fleurieu Peninsula (refer to Figure 1) are situated between the townships of Yankalilla, Ashbourne and Victor Harbor. They extend across an environmental gradient with high rainfall forest and heath occurring in the west near Myponga, extensive low-lying swampy areas in the central area near Mount Compass, through to slightly dryer woodland and heath further east towards Ashbourne.

These parks are proclaimed under the *National Parks and Wildlife Act 1972* (NPW Act) which sets management objectives for South Australia's national parks and provides a regulatory framework to support their management. These parks will be managed in accordance with the objectives of management as defined in the NPW Act.

The parks in this plan have been proclaimed primarily for the protection of high conservation values, and as a result, there are minimal visitor facilities provided. Some of these parks contain Fleurieu Peninsula Swamps, which are listed as critically endangered under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A large number of national and state listed threatened flora and fauna species are also protected in these parks (refer to Appendix 1 and 2), some of which are endemic to the Hindmarsh Valley area.

Early planning for the establishment of the recently proclaimed Hindmarsh Valley National Park considered the provision of mountain bike trails. However, following further investigations across the park, the full extent of the diversity of habitats and native plant species became evident. The vegetation associations and endemic plant species found in the park are poorly represented in South Australia's protected area network and are of extremely high conservation significance. They are susceptible to threats associated with trail development and use, including the irreversible spread of phytophthora (*Phytophthora cinnamomi*), weed increase, and fine-scale alterations to water movement. For this reason, biodiversity conservation programs with a focus on managing threats will be the primary focus for the long-term management of the park. Therefore, allowing mountain biking as an activity in Hindmarsh Valley National Park is not envisioned.

Existing management tracks and trails provide access in some of these parks. Sections of the Heysen Trail runs through Finniss, Kyeema, Mount Magnificent, Myponga and Yulte conservation parks.

Strategic management of the parks will focus on maintaining and enhancing ecosystem health and protecting threatened species by focusing on the management of threats including total grazing pressure, inappropriate fire regimes, phytophthora, weeds, pest animals and the impacts of climate change. Existing visitor facilities will be maintained and new basic facilities may be developed in the future if the level of demand warrants the investment. Any future development must ensure conservation values are not compromised.

The community has been active in some of these parks for decades. Maintaining and building relationships with volunteers, researchers and adjacent landholders will support their continued involvement in park management opportunities and help to achieve effective outcomes.

The strategic management, objectives and strategies outlined in this plan are designed to enable adaptive management of the parks. The specific actions required to manage these parks in accordance with the plan will be developed and monitored at a park operations level. This approach provides the flexibility necessary to address future management challenges and opportunities.

Central Fleurieu Peninsula Parks

The parks covered by this plan are (refer to Figure 1):

Bullock Hill Conservation Park (221 ha)

Cox Scrub Conservation Park (563 ha)

Finniss Conservation Park (123 ha)

Gum Tree Gully Conservation Park (111 ha)

Hesperilla Conservation Park (11 ha)

Hindmarsh Valley National Park (423 ha)

Kyeema Conservation Park (346 ha)

Mount Billy Conservation Park (197 ha)

Mount Magnificent Conservation Park (90 ha)

Myponga Conservation Park (168 ha)

Nixon-Skinner Conservation Park (8 ha)

Scott Conservation Park (210 ha)

Spring Mount Conservation Park (280 ha)

Stipiturus Conservation Park (68 ha)

Yulte Conservation Park (41 ha)

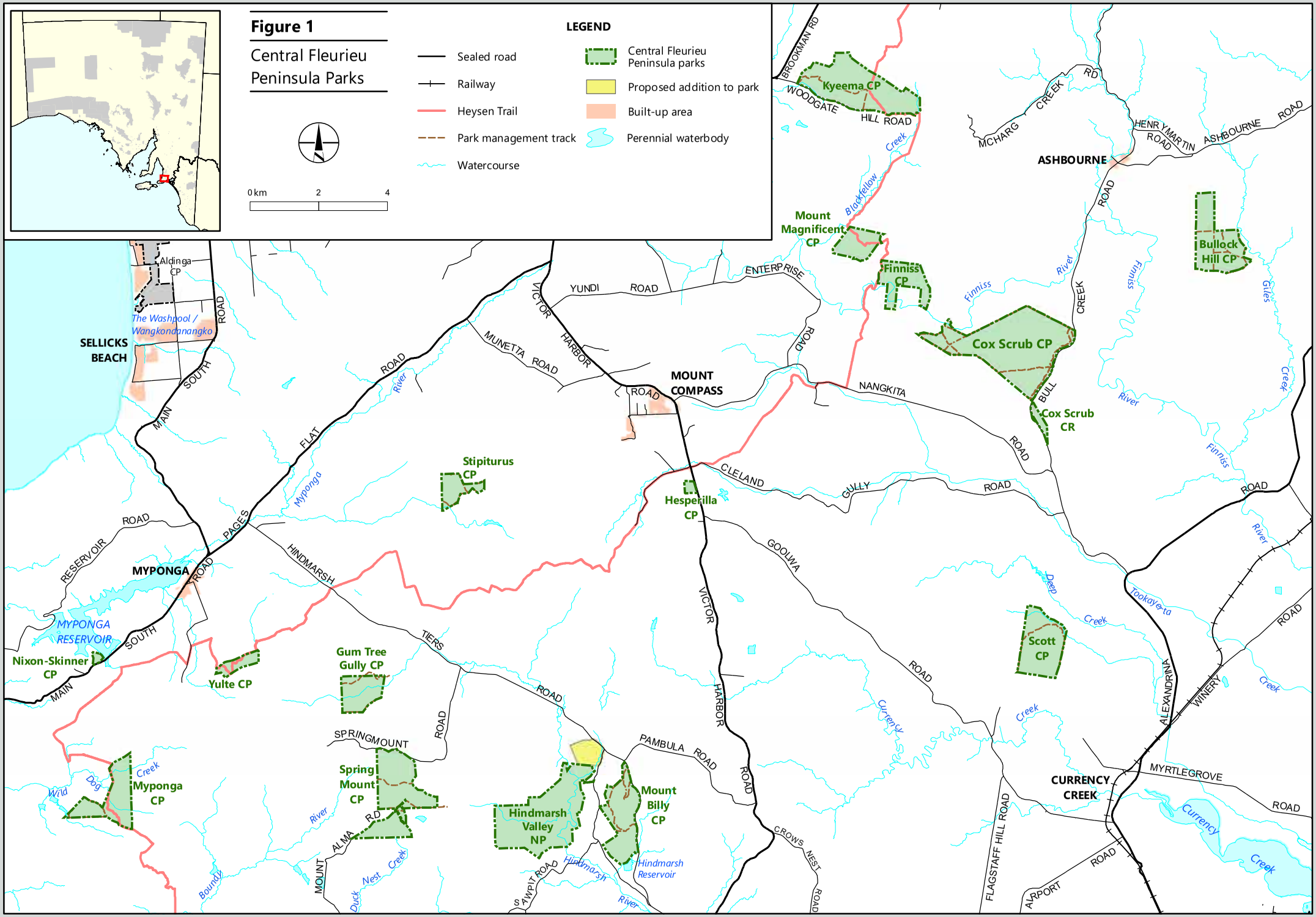
Figure 1
Central Fleurieu Peninsula Parks
LEGEND
Sealed road
Railway
Heysen Trail
Park management track
Watercourse
Central Fleurieu Peninsula parks
Proposed addition to park
Built-up area
Perennial waterbody
0 km
2
4
Kyeema CP
Mount Magnificent CP
Finniss CP
Bullock Hill CP
Cox Scrub CP
Cox Scrub CR
Stipiturus CP
Hesperilla CP
Nixon-Skinner CP
Yulte CP
Gum Tree Gully CP
Myponga CP
Spring Mount CP
Hindmarsh Valley NP
Mount Billy CP
Scott CP
Aldinga CP
ASHBOURNE
MOUNT COMPASS
MYPONGA
SELLICKS BEACH
CURRENCY CREEK
MYPONGA RESERVOIR
The Washpool / Wangkondanangko
BROOKMAN RD
WOODGATE HILL ROAD
MCHARG CREEK RD
HENRY MARTIN ROAD
ASHBOURNE ROAD
BLACKFELLOW CREEK
FINNISS RIVER
GILES CREEK
ENTERPRISE ROAD
YUNDI ROAD
VICTOR HARBOR ROAD
MUNETTA ROAD
NANGKITA ROAD
BULL CREEK ROAD
MAIN SOUTH ROAD
FLAT ROAD
PAGES ROAD
RESERVOIR ROAD
HINDMARSH TIERS ROAD
SPRINGMOUNT ROAD
ALMA RD
MOUNT COMPASS ROAD
CLELAND GULLY ROAD
GOOLWA ROAD
PAMBULA ROAD
CROWS NEST ROAD
SAWPIT ROAD
FLAGSTAFF HILL ROAD
AVARPORT ROAD
MYRTLEGROVE ROAD
ALEXANDRINA WINERY ROAD
Myponga River
Deep Creek
Tookayerta Creek
Currency Creek
Hindmarsh River
Hindmarsh Reservoir
Duck Nest Creek
Wild Dog Creek
Boundy Creek

Park significance and purpose

The central Fleurieu Peninsula is part of the traditional lands of the Kaurna and Peramangk peoples for whom the land, water, plants and animals are central to their spirituality and identity. Both nations maintain a strong connection to the area bound by heritage, birth rites, dreaming and creation stories. Sites and features across the Fleurieu landscape have cultural importance and are connected to stories that have been passed down over generations.

These parks are significant for containing outstanding ecological values and the diverse habitats and range of threatened species they protect, some of which are poorly represented in the state's protected area system. In particular, the nationally critically endangered Fleurieu Peninsula Swamps, and nationally threatened species including the Hindmarsh Valley greenhood (*Pterostylis bryophila*), Hindmarsh correa (*Correa calycina var. calycina*) and Mount Compass oak-bush (*Allocasuarina robusta*), which are endemic to the Fleurieu Peninsula.

The parks can be grouped into 3 relatively distinct clusters based on ecological and geographic features. Collectively they occupy 2,860 hectares and contain a wide range of vegetation associations. Heath habitat in these parks is of particular importance for the survival of nationally threatened and heath-dependent species including the Mount Lofty Ranges southern emu-wren (*Stipiturus malachurus intermedius*), southern brown bandicoot (*Isoodon obesulus obesulus*), chestnut-rumped heathwren (Mount Lofty Ranges) (*Hylacola pyrrhopygia parkeri*) and beautiful firetail (MLR, KI) (*Stagonopleura bella samueli*).

The central Fleurieu area is one of the last places in the region the state-threatened Rosenberg's goanna (*Varanus rosenbergi*) still occurs and its numbers are considered to be critically low.

Before being proclaimed as reserves under state legislation, parts of some of these parks were subject to activities including logging, grazing and mining. Some of the cleared areas are regenerating with native species while other areas provide significant opportunities for restoration to increase habitat.

While visitors can enjoy these parks, there are minimal facilities provided. Trails and management tracks in several of the parks provide opportunities for low-impact recreation such as bushwalking, birdwatching and spending time in nature.

Western cluster

The western cluster includes Hindmarsh Valley National Park, Myponga, Yulte, Nixon-Skinner, Gum Tree Gully, Spring Mount and Mount Billy conservation parks. These parks receive high rainfall and are significant for their high-elevation forests, woodlands and steeply dissected gullies.

They contain good examples of perched Fleurieu Peninsula Swamps and are particularly significant for protecting several endemic plant species, particularly the Hindmarsh Valley greenhood and Hindmarsh correa. The Hindmarsh Valley greenhood is nationally critically endangered and its distribution is restricted to the Hindmarsh Valley area. The main populations are found in Hindmarsh Valley National Park and Mount Billy Conservation Park. The Hindmarsh correa is nationally vulnerable and is endemic to the Fleurieu Peninsula. Two of the main populations are found in Hindmarsh Valley National Park and Myponga Conservation Park.

Heath and gully habitats in these parks are important for the nationally threatened southern brown bandicoot, chestnut-rumped heathwren, Mount Lofty Ranges southern emu-wren, and Bassian thrush (*Zoothera lunulata halmaturina*).

Volunteers are active in these parks undertaking conservation work, particularly in Mount Billy and Nixon-Skinner conservation parks.

Gum Tree Gully Conservation Park

Gum Tree Gully Conservation Park was proclaimed to protect remnant vegetation, including Fleurieu Peninsula Swamps and habitat identified as suitable for the Mount Lofty Ranges southern emu-wren. Eucalypt woodland and forest is dominated by pink gum (*Eucalyptus fasciculosa*), messmate stringybark (*E. obliqua*), brown stringybark (*E. baxteri*), and cup gum (*E. cosmophylla*). The nationally threatened chestnut-rumped heathwren, Bassian thrush, southern brown bandicoot, and Mount Lofty speedwell (*Veronica derwentiana ssp. homalodonta*) have been recorded in the park. The population of Mount Lofty speedwell is the largest known in the region.

The park also provides habitat for 19 plant, 5 bird, and one mammal species listed as threatened in South Australia under schedules 7, 8, and 9 of the NPW Act. The park is surrounded by privately owned land and is inaccessible to the public. No facilities are provided or envisioned for this reason.

Hindmarsh Valley National Park

Hindmarsh Valley National Park is the most recently proclaimed park in the central Fleurieu Peninsula. It was proclaimed in 2021 to protect the significant biodiversity values of the land, including nationally threatened and endemic species and several Fleurieu Peninsula Swamps.

Woodland communities are found on the hill slopes and are dominated by pink gum, rough-barked manna gum (*Eucalyptus viminalis ssp. cygnetensis*), messmate stringybark, and brown stringybark. Rough-barked manna gum woodland is also prominent on the lower slopes and valleys along with swamp gum (*E. ovata ssp. ovata*) and South Australian blue gum (*E. leucoxylon ssp. leucoxylon*). Some areas of the park that were cleared for grazing are now slowly regenerating with native vegetation. Other cleared areas provide opportunities for restoration to increase habitat. The parcel of land adjoining the northern boundary which is currently dedicated to SA Water has been proposed for addition to the park.

The remnant native vegetation provides critical habitat for the nationally threatened Hindmarsh Valley greenhood, Hindmarsh correa, Mount Compass oak-bush, clover glycine (*Glycine latrobeana*), Mount Compass swamp gum (*Eucalyptus paludicola*), southern brown bandicoot, and Bassian thrush. A further 26 flora, 11 bird, 2 mammal, 2 reptile, and one amphibian species found in the park are listed as threatened at the state level.

Two dams in the southwestern corner of the park are fed by a seasonal spring located in the elevated northern section of the park. Several property owners adjacent to the park have a Grant of Easement permitting water extraction from these dams for garden and stock watering purposes. Management tracks provide opportunities for recreation.

The park is proclaimed jointly under Section 43 of the NPW Act which enables appropriate resource and exploration and development under the *Mining Act 1971* and the *Petroleum and Geothermal Energy Act 2000*.

Mount Billy Conservation Park

Mount Billy Conservation Park conserves a significant patch of native vegetation containing diverse plant communities including heath with desert banksia (*Banksia ornata*), South Australian blue gum and pink gum grassy woodlands, small pockets of brown stringybark open forests and drooping sheoak (*Allocasuarina verticillata*) woodland and good examples of rough-barked manna gum. The park also contains a spring-fed watercourse and waterfalls.

The nationally threatened Hindmarsh Valley greenhood, clover glycine, Mount Compass swamp gum, chestnut-rumped heathwren, Bassian thrush and southern brown bandicoot have been recorded in the park. The Mount Lofty Ranges southern emu-wren has been recorded in the park but is now considered locally extinct. A further 37 flora, 10 bird, 4 mammal and one reptile species found in the park are listed as threatened at the state level.

Management tracks provide opportunities for recreation.

The park is proclaimed jointly under Section 43 of the NPW Act, which enables appropriate resource and exploration and development under the *Mining Act 1971* and the *Petroleum and Geothermal Energy Act 2000*.

Myponga Conservation Park

Myponga Conservation Park conserves remnant vegetation dominated by brown stringybark, pink gum, and cup gum open forest over wet heaths in the gullies and low open woodland. The park also contains steep-sided gullies and permanent creeks with waterfalls. The nationally threatened Hindmarsh correa occurs in the park.

The park's diverse flora supports mammal and bird fauna including the nationally threatened southern brown bandicoot, chestnut-rumped heathwren and Bassian thrush. A further 8 flora, 6 bird, 3 mammal and 2 reptile species found in the park are listed as threatened at the state level. The Heysen Trail traverses the park.

Nixon-Skinner Conservation Park

Nixon-Skinner Conservation Park is the first privately-donated reserve to be established in South Australia and it's named after the 2 grandfathers of the previous owner. It supports an open forest of messmate stringybark and pink gum. The park contains an important population of the nationally threatened southern brown bandicoot. A further 6 bird, 4 mammal, 3 plant and one amphibian species listed as threatened at the state level are found in the park. There is a walking trail in the park that provides views of the Myponga Reservoir.

Spring Mount Conservation Park

Spring Mount Conservation Park is situated in a high rainfall area and consists of an undulating ironstone plateau with steep valleys. The park conserves an extensive and relatively undisturbed area of mature brown stringybark forest and Fleurieu Peninsula Swamps. The park has significant infestations of phytophthora that is impacting the remnant vegetation, which provides habitat for the nationally threatened Mount Lofty speedwell, Bassian thrush and southern brown bandicoot. The chestnut-rumped heathwren has been recorded in the park but is now considered locally extinct. The park also provides habitat for 13 flora, 12 bird, 2 mammal and 2 reptile species listed as threatened at the state level. This includes the Rosenberg goanna and yellow-bellied water skink *(Eulamprus heatwolei*). The skink population is reliant on large fallen timber in the park and is significant for being a population not located along a watercourse.

A basic car park on the eastern side of the park provides access to tracks within the park.

Yulte Conservation Park

Yulte Conservation Park protects remnant vegetation dominated by tall open shrubland. It also protects open eucalypt forest, heathland and a small Fleurieu Peninsula Swamp. Habitat in the park is important for the nationally threatened chestnut-rumped heathwren and southern brown bandicoot, as well as the state-threatened Rosenberg's goanna. A further 6 bird and one mammal species listed as threatened at the state level have been recorded in the park. The Heysen Trail traverses the park.

Central cluster

The central cluster of Stipiturus and Hesperilla conservation parks conserve the largest remaining Permian Sand Fleurieu Peninsula Swamps in the region. These parks are important for swamp-based populations of the Mount Lofty Ranges southern emu-wren. Stipiturus Conservation Park in particular contains a large concentration of threatened species, including the endemic Mount Compass oak-bush. Volunteers have been very active in Stipiturus Conservation Park, working in partnership with the Department for Environment and Water, environmental organisations and researchers to understand and improve the swamp and habitat it provides for the many important native flora and fauna species.

Hesperilla Conservation Park

Hesperilla Conservation Park is a relatively small park that was proclaimed to protect a Fleurieu Peninsula Swamp that supports a significant population of Mount Lofty Ranges southern emu-wren. The nationally threatened Mount Compass oak-bush, and 7 plant and 4 bird species listed as threatened at the state level are also found in the park.

A network of drains that pre-date the proclamation of the park has altered the hydrology and ecology of the site.

Stipiturus Conservation Park

Stipiturus Conservation Park protects the largest remaining intact peat swamp ecosystem on the Fleurieu Peninsula and contains an extremely rich diversity of flora species, including a concentration of threatened species.

The nationally threatened Mount Compass oak-bush, Mount Compass swamp gum, Murffet's leek-orchid (*Prasophyllum murfetii*), Osborn's Eyebright (*Euphrasia collina ssp. osbornii*), Bassian thrush and Mount Lofty Ranges southern emu-wren have been recorded in the park. A further 47 plant, 10 bird, one mammal and one amphibian species listed as threatened at the state level have also been recorded in the park. South Australia's only endemic snake, the pygmy copperhead (*Austrelaps labialis*) is known to inhabit the park.

Substantial areas of revegetation in formerly cleared areas of both the swamp and adjacent dryland areas has been undertaken. This includes the translocation of nationally critically endangered *Hibbertia tenuis* plants. Exclusion fencing has been erected to protect revegetation, Murffet's leek-orchid and Mount Compass oak-bush, from grazing kangaroos. Work has been undertaken to restore the hydrology and ecology of the site, which was altered by a network of agricultural drains that pre-date the park.

Eastern cluster

The eastern cluster of Kyeema, Mount Magnificent, Finniss, Cox Scrub, Scott and Bullock Hill conservation parks, conserve areas of sand heath, heathy woodland and eucalypt woodlands associated with the slightly dryer rainfall band of the eastern Fleurieu Peninsula. The heath vegetation communities on sandy soils in Bullock Hill and Cox Scrub conservation parks are not well represented in other reserves in the region. Habitat in these parks is particularly important for the chestnut-rumped heath wren, Rosenberg's goanna and the beautiful firetail (MLR, KI). Significant revegetation is being undertaken in partnership with environmental groups in several of these parks to expand the amount of habitat available.

Basic car parks at most parks provide safe access for the public to utilise the walking trails, including sections of the Heysen Trail. Walking and birdwatching are activities regularly undertaken by the public in these parks. Volunteer groups have been active in these parks for decades and regularly undertake conservation work including monitoring, weed control and revegetation.

Bullock Hill Conservation Park

Bullock Hill Conservation Park protects pink gum and cup gum woodlands with a dense understorey of heath vegetation. On the eastern boundary is one of the few remaining examples of South Australian blue gum grassy woodland, a vegetation association poorly represented in South Australia's reserve system. Areas of heath vegetation support a population of nationally threatened southern brown bandicoot, the most eastern population of the species in the region. A further 11 plant, 13 bird and one mammal species listed as threatened at the state level have been recorded in the park.

A basic car park provides access to the park and the 3 hikes available.

Part of the park is proclaimed jointly under Section 43 of the NPW Act, which enables appropriate resource and exploration and development under the *Mining Act 1971*.

Cox Scrub Conservation Park

Cox Scrub Conservation Park protects a large patch of dry heath vegetation important for native species including the nationally threatened beautiful firetail (MLR, KI), chestnut-rumped heathwren, Mount Lofty Ranges southern emu-wren, Bassian thrush and southern brown bandicoot, and the state threatened Rosenberg's goanna. The population of beautiful firetail (MLR, KI) in the park is thought to be one of only 2 populations on mainland South Australia. Mount Lofty Ranges southern emu-wrens were reintroduced to the park in 2001 and 2002 after the population was destroyed by fire in 1983.

Small patches of open eucalypt woodland dominated by brown stringybark, with pink gum and cup gum are also present in the park. The Finniss River passes through the north-western corner of the park, and a steep-sided valley in the south-eastern corner contains a permanent spring-fed creek.

The park provides habitat for the nationally threatened Mount Compass swamp gum, white beauty spider-orchid (*Caladenia argocalla*) and Osborn's eyebright. A further 32 plant, 18 bird, 4 mammal and 2 reptile species listed as threatened at the state level have been recorded in the park.

Basic car parks provide access to the 3 hikes available in the park.

Part of the park is proclaimed jointly under Section 43 of the NPW Act, which enables appropriate resource and exploration and development under the *Mining Act 1971* and the *Petroleum and Geothermal Energy Act 2000*.

Finniss Conservation Park

Finniss Conservation Park contains steep ridges and gullies and protects high-rainfall vegetation communities. The Finniss River flows through the southern portion of the park. Vegetation associations include an open woodland of pink gum and blue gum over a sparse understorey, low closed woodland and low open forest with messmate stringybark, pink gum and cup gum, and a tall open shrubland of brown stringybark and cup gum over dense understorey.

Habitat in the park provides for 5 bird and 8 plant species that are listed as threatened at the state level. A vehicle track on the western boundary of the park is part of the Heysen Trail.

Kyeema Conservation Park

Kyeema Conservation Park conserves woodland and low open forest dominated by messmate stringybark, with pink gum and cup gum over a thick and diverse understorey.

Habitat in the park is important for a population of the nationally threatened Bassian thrush. The park also provides habitat for the nationally threatened chestnut-rumped heathwren, southern brown bandicoot and Mount Lofty speedwell. A further 20 plant, 9 bird, 4 mammal and one amphibian species listed as threatened at the state level have been recorded in the park.

Extensive revegetation of previously cleared areas is being undertaken to provide vital habitat for declining woodland birds and threatened species including the Mount Compass oak-bush, Mount Compass swamp gum and Rosenberg's goanna.

The park provides habitat for the square-tailed kite (*Lophoictinia isura*), which is listed as endangered in South Australia. It also contains a population of swamp wallaby (*Wallabia bicolor*) which is considered introduced in the region.

A basic car park provides access to 2 hikes, including a section of the Heysen Trail.

Mount Magnificent Conservation Park

Mount Magnificent Conservation Park contains steep terrain and rocky outcrops. The summit is 380 metres above sea level and provides views of the southern coast. The park protects areas of woodland consisting of pink gum, cup gum, blue gum, manna gum and low open forest consisting of pink gum, cup gum, messmate stringybark and brown stringybark.

The nationally threatened clover glycine, chestnut-rumped heathwren and Bassian thrush have been recorded in the park. A further 6 plant, 10 bird, 3 mammal and one amphibian species listed as threatened at the state level have been recorded in the park. This includes the endangered square-tailed kite.

A basic car park provides access to 2 hikes, including a section of the Heysen Trail and ascent to the Mount Magnificent summit.

Scott Conservation Park

Scott Conservation Park is dissected by 2 creeks that flow from west to east in the northern section of the park. Vegetation associations vary from north to south. North of the creek, a pink gum open forest changes to a closed woodland of blue gum and pink gum. South of the creek is dominated by tall closed shrubland of brown stringybark and pink gum, with cup gum. An area of sand heath is in the south-east corner of the park.

The nationally threatened pale leek-orchid (*Prasophyllum pallidum*) occurs in the park. The chestnut-rumped heathwren was previously present in the park but is now considered locally extinct. A further 17 flora, 17 bird, one mammal and one amphibian species listed as threatened at the state level has been recorded in the park.

Basic car parks provide access to 2 hikes in the park.

What are we looking after?

- High diversity of native flora and fauna, particularly endemic and threatened species.
- Patches of remnant vegetation within a fragmented landscape, including nationally critically endangered Fleurieu Peninsula Swamps.
- Diverse habitats including open forests, woodlands, heathlands, swamps, riparian areas and waterfalls, some of which are poorly represented in South Australia's protected area system.
- 119 plant species that are listed as threatened under the *National Parks and Wildlife Act 1972*. This includes 12 species that are also listed under the *Environment Protection and Biodiversity Conservation Act 1999* (refer to Appendix 1).
- 37 animal species that are listed as threatened under the *National Parks and Wildlife Act 1972*. This includes 6 species that are also listed under the *Environment Protection and Biodiversity Conservation Act 1999* (refer to Appendix 2).
- Landscape features and sites that are of cultural and spiritual significance to First Nations peoples and important for their culture.
- Scenic landscapes with a diversity of wildlife and opportunities for people to connect with nature and enjoy the unique features of the local landscape.

What are the challenges and opportunities?

Key challenges and opportunities in the protection and management of the parks are:

- Maintaining healthy ecosystems within a modified landscape to ensure that they continue to provide habitat for native species.
- Managing the impacts of pest plants and animals, phytophthora and total grazing pressure to protect threatened species and ecosystem health.
- Understanding fire ecology to enable fire regimes to be managed for better ecological outcomes.
- Managing the increasing risk of bushfires to ensure ecological health and community safety.
- Managing threats following fires (both bushfire and prescribed fire), including increased grazing pressure and predation, to minimise impacts on native species.
- Developing a better understanding of threatened species populations and ensuring priority actions for their protection are implemented.
- Collaborating with First Nations peoples and stakeholders including neighbours, researchers, volunteers and environmental groups to understand, monitor and manage threats for effective conservation and cultural outcomes.
- Understanding the impacts of climate change and the strategies required to support ecosystem resilience to decreasing rainfall, increasing temperatures and increased risk of extreme fires.
- Restoring and revegetating cleared areas to extend habitat for species that are patch-dependent and approaching minimum population viability thresholds.
- Based on an understanding of the hydrological requirements, restoring hydrology in swamps where benefits for biodiversity and system function can be achieved, and where impacts to existing values can be managed.
- Providing opportunities for people to undertake low-impact recreation such as bushwalking, bird watching and experiencing time in nature, while minimising impacts to park values.

Theme 1: Conserving heathlands, woodlands and forests

Maintaining the ecological health of these parks is critical for the provision of habitat that supports the persistence of threatened and endemic species in the region. Management of threats including total grazing pressure, large-scale fires, pest plants and animals and the spread of phytophthora are priorities.

Heath vegetation in these parks, including both dry and sand heath, is particularly valuable as it provides an understorey dominated by dense shrubby vegetation that is crucial habitat for the southern brown bandicoot, Mount Lofty Ranges southern emu-wren, chestnut-rumped heathwren, beautiful firetail (MLR, KI) and Rosenberg's goanna. Forested areas with damp gullies and a thick understorey are favoured areas for the nationally threatened Bassian thrush. All these animals rely on a dense and healthy understorey to persist in the landscape.

Recovery plans and conservation advice statements for species listed under the *Environment Protection and Biodiversity Conservation Act 1999* will be used to inform actions where necessary to stop their decline and support their recovery. Monitoring populations of threatened species will enable appropriate control measures to be implemented for their conservation. Further surveys of threatened species will enable a better understanding of their distribution and will support more effective management. This includes translocated species such as *Hibbertia tenuis* plants in Stipiturus Conservation Park and the reintroduced Mount Lofty Ranges southern emu-wrens in Cox Scrub Conservation Park.

Pest plants threaten habitat integrity by competing with native plants and impeding their growth. They can also alter vegetation structures. Control will be implemented to protect areas of high conservation value and where pest plants threaten the survival of threatened flora populations.

Introduced pests including foxes (*Vulpes vulpes*), cats (*Felis catus*), black rats (*Rattus rattus*), rabbits (*Oryctolagus cuniculus*), brown hares (*Lepus europaeus*), goats (*Capra hircus*) and deer species are present across the Fleurieu Peninsula and are known to occur in the parks. Even in low numbers these species can have significant impacts on biodiversity and will require management to their limit effects on biodiversity such as predation of native fauna, grazing and trampling of native vegetation and spreading of phytophthora.

Control measures for pests that are a significant contributor to the decline of native species and where programs are likely to be effective in supporting the recovery of threatened species will be a priority. The impact of deer in the region is an increasing issue and one that will be addressed in partnership at a landscape-scale. Once finalised, the Hills and Fleurieu Landscape Board Regional Pest Plant and Animal Strategy 2023-2028 will provide guidance on prioritising pest plant and animal management in the parks, consistent with priorities across the Hills and Fleurieu region.

Western grey kangaroos (*Macropus fuliginosus*) are currently the biggest contributor to total grazing pressure in many of the reserves in this plan, and their strategic management is required. Their large numbers are impacting native vegetation, revegetation, conservation values of state and national significance and land adjacent to the parks, particularly at the interface between scrub and pasture. In some parks, fencing has been installed to prevent kangaroo access to areas that contain threatened plants such as orchids and where revegetation has occurred.

Grazing by kangaroos after prescribed burning can affect regenerating vegetation post-fire. Where left unmanaged this is leading to changes in vegetation composition and structure.

A population of swamp wallaby (*Wallabia bicolor*), a species not originally found in the Mount Lofty Ranges, has established in Kyeema Conservation Park and other areas of the Fleurieu Peninsula. This population appears stable but has the potential to result in damage to native vegetation if numbers increase.

Evidence of total grazing pressure will be used where required to determine impacts to habitat quality by native and introduced herbivores. Where documented evidence indicates that western grey kangaroos and swamp wallabies are a large contributing factor to total grazing pressure resulting in unsustainable impacts to the conservation values of the parks, strategic management will be considered. Where non-lethal management options are considered ineffective or not feasible, culling will be implemented as it remains the only practicable method of management. Kangaroo management may include commercial harvest options. Any culling will follow strict procedures for the humane destruction of animals.

Phytophthora (*Phytophthora cinnamomi*) is an introduced soil-borne pathogen that attacks and destroys plant root systems resulting in the destruction of habitat through vegetation dieback. It can be easily spread by humans on the treads of shoes, on vehicle tyres and with the movement of soil. Phytophthora infestations are widespread across the Fleurieu Peninsula and are present in many of the parks. There is no cure for phytophthora and although difficult, it is important to minimise its spread from an infected area. Management will focus on monitoring and containing infestations, and minimising the risk of spread through controlling access, application of hygiene practices, educating visitors and timing of operational activities to avoid working in wet conditions. Controlling and restricting visitor access to certain areas may be considered to protect areas of high conservation value. This is particularly relevant in Hindmarsh Valley National Park, which until recently, has been closed to the public.

Fire, as a result of lightning and cultural burning, has been part of the Australian landscape for thousands of years. It has shaped flora, fauna and ecological processes and continues to contribute to a healthy ecosystem. Heath habitats in these parks are particularly fire-prone and species within them have adapted to fire. Landscape modification, active fire suppression and climate change have resulted in changes in fire regimes across the landscape. The subsequent impact in these parks, which are small and fragmented, can be severe for at-risk native species. The extinction of Mount Lofty Ranges southern emu-wrens in Cox Scrub Conservation Park after bushfires in 1983 is one example.

A fire management plan will be developed for these parks to guide management activities aimed at reducing bushfire risk and managing conservation values. Fire management activities, including prescribed burning, will be implemented across strategic areas of the parks to reduce the risk, intensity and spread of bushfires, and make suppression more achievable and safer. Prescribed burning will also be used as an ecological tool to maintain and improve habitat health.

In heath habitats, including woodlands with understorey heath, the type and frequency of fire is important for their health. Long intervals between fires can prevent the regeneration of some plants, such as desert banksia (*Banksia ornata*) and Allocasuarina species, which can change habitat density and make heathlands unsuitable for a range of fauna. In an already-fragmented landscape like the Fleurieu Peninsula, this is likely to contribute to further declines of threatened species. Fire regimes will be managed to accommodate fire-dependent species, and promote habitat for heath-dependent species.

Encouraging natural regeneration, supported by strategic revegetation, will increase habitat for many native plants and animals, including threatened species. Areas recovering from previous land-use activities, particularly cleared areas adjoining remnant vegetation and areas between stands of vegetation, are suited to the restoration of habitat. Outcomes for less vagile species such as the beautiful firetail (MLR, KI) that are patch-dependent and likely to be near minimum population viability thresholds should be a priority.

Maintaining good relationships with park neighbours will be central to working together to manage contiguous remnant vegetation, prevent stock from entering the parks, and coordinate responses to threats. Working with neighbours to control pests and link vegetation where possible will support habitat connectivity across the landscape. Land adjacent to the northern boundary of Hindmarsh Valley National Park is proposed to be added to the park. The addition of other land adjacent to the parks will be

considered where feasible and the values align to the priorities for the states protected area network.

Climate change projections for the region indicate decreasing rainfall, increasing temperatures and more heightened fire danger days. It is likely to exacerbate threatening processes such as impacts from pest plants and animals, changes in water flows and more frequent and higher intensity bushfires. Widespread tree decline across the region is becoming more evident, but not well understood or documented. Understanding the impacts of a changing climate and how to support ecosystems to be resilient will be crucial in successful long-term park management. Research and monitoring will be vital in developing an understanding and implementing subsequent programs to mitigate the impacts.

Working in collaboration with First Nations peoples and organisations including Friends of Parks volunteers, Hills and Fleurieu Landscape Board, research organisations, non-government organisations and local government will be important for successful conservation activities and supporting community participation in park management. Volunteers have been active in some of these parks since the 1990s and they continue to demonstrate community stewardship of the parks. Support for volunteers and the conservation outcomes that they achieve will continue.

Promoting public participation in programs such as citizen science will encourage community involvement in monitoring and reporting, help to increase scientific knowledge and build a better understanding of wildlife populations.

Objective

Protect ecosystem health by enhancing habitat and managing key threats.

Strategies

- Monitor populations of threatened species and support further surveys to better understand the health and extent of populations, and to inform operational requirements for their protection.
- Refer to actions identified in recovery plans and conservation advice statements for species listed under the *Environment Protection and Biodiversity Conservation Act 1999* to prevent further decline or extinction and to support their recovery.
- Control pest animals, including foxes (*Vulpes vulpes*), cats (*Felis catus*), rabbits (*Oryctolagus cuniculus*), brown hares (*Lepus europaeus*), goats (*Capra hircus*), black rats (*Rattus rattus*) and deer species to limit their impact on biodiversity and where their control can support the recovery of threatened species. Work in partnership with neighbours and stakeholders and contribute to landscape-scale control programs for effective outcomes.
- Implement western grey kangaroo (*Macropus fuliginosus*) and swamp wallaby (*Wallabia bicolor*) management programs where total grazing pressure indicates adverse impacts to conservation values. Consider commercial management options for the western grey kangaroo in consultation with the kangaroo industry.
- Promote awareness of phytophthora (*Phytophthora cinnamomi*) and prevent its spread through the application of strict hygiene strategies. Consider modification of visitor and park management activities to reduce the spread of phytophthora.
- Implement pest plant control programs to improve habitat and reduce impacts in areas of high conservation value. Control will focus on species that are impacting threatened plants, are having a significant effect on habitat structure and function and new and emerging species.
- Rehabilitate cleared areas through revegetation and encouraging natural regeneration to increase the area of available habitat, support plant diversity and improve ecological function. Partner with neighbours to create corridors across public and private land where possible.
- Develop a fire management plan for the parks to guide activities to minimise the likelihood and impact of bushfires and to maintain and enhance ecological values.
- Develop and maintain appropriate fire management infrastructure to support effective response to ignitions in these parks or fires threatening them.
- Use prescribed burning to enhance habitat quality and to support the protection of life, property and ecological values across the landscape.
- Support monitoring and research to inform climate change adaptation strategies for threatened species and ecosystem health.
- Continue existing partnerships and encourage collaboration with First Nations, environmental groups, volunteers, local councils, Hills and Fleurieu Landscape Board and neighbouring landholders to achieve ecological outcomes and foster community stewardship of the parks.
- Finalise the addition of land dedicated to SA Water adjacent the northern boundary of Hindmarsh Valley National Park into the park (refer to Figure 1). Explore opportunities for further additions to parks as they arise.

Theme 2: Conserving Fleurieu Peninsula Swamps

Maintaining the ecological health of swamps is a priority for the management of parks in the region. Fleurieu Peninsula Swamps are water-dependent wetlands that support a diversity of unique aquatic plants and animals, some of which are found nowhere else in Australia. They occur in or adjacent to permanently waterlogged soil, are densely vegetated, and are typified by their reedy or heathy vegetation growing on peat, silt, peat silt, or black clay soils. Many of the native plant species that grow in these swamps are either rare or threatened at the national state or regional level. The *Conservation Advice for the Swamps of the Fleurieu Peninsula ecological community* guides detailed actions necessary to stop their decline and support their recovery.

Before the manipulation of the landscape by Europeans, the Mount Lofty Ranges supported an extensive network of swamps and wetlands, mainly located along drainage lines and watercourses. This network has been severely impacted by drainage for agriculture, water diversion, vegetation clearance, incursions of pest plants and agricultural activities such as grazing. Few remaining Fleurieu Peninsula Swamps are included within the state's protected area system, and most have been subject to past activities resulting in a decline in swamp health.

Stipiturus and Hesperilla conservation parks are situated low in the landscape and are thought to be predominantly underpinned by the Permian Sands aquifer. However, seasonal surface flows and local seepage are thought to also have some influence on inundation in these swamps.

Less than 20% of the wetlands of the Fleurieu Peninsula are considered to be Permian Sands wetlands (Barnett and Rix 2006).

Stipiturus Conservation Park contains part of what is known as 'Glenshera Swamp'. It is the largest remaining intact peat swamp ecosystem on the Fleurieu Peninsula. Over half of the native plants found in and around the swamp have regional and state conservation significance. Stipiturus and Hesperilla conservation parks are important for protecting swamp-based populations of the nationally endangered Mount Lofty Ranges southern emu-wren.

Hindmarsh Valley National Park, Gum Tree Gully Conservation Park and Spring Mount Conservation Park are located high in the landscape and contain good examples of perched swamps. These swamps are dependent on rainfall-runoff or lateral sub-surface soil water movement and receive no contribution from regional groundwater. As a result, perched swamps are particularly vulnerable to changes in hydrology in their immediate catchments.

Impacts from reduced rainfall expected as a result of climate change, construction of dams and diversion of water, together with an increase in the use of total water allocations, is likely to alter the natural patterns of inundation and overland flows for swamps. Building natural resilience to buffer swamps against these impacts will be important for maintaining swamp health and the habitat that they provide. Maintaining relationships with planning authorities and adjoining land managers will be important in providing input into external influences such as changes in land use and water allocation. Monitoring keystone species

over time could help identify the impacts of climate change or changes in environmental conditions.

Restoring the ecology and habitat quality of swamps can be achieved through hydrological management. Carefully removing agricultural drains and implementing measures that will slow down water movement through the sites will help preserve the water requirement of swamps and retain vegetation associations. Revegetating areas adjacent to swamps will create buffer zones important for protecting swamp integrity and support the re-establishment of key plant species. The infill of cleared areas between habitats will assist the recovery of fauna species, including the Mount Lofty Ranges southern emu-wren and southern brown bandicoot, an important outcome of vegetation management and restoration programs.

Pest plants, including introduced pasture grasses and woody weeds such as blackberry (Rubus spp.), Montpellier broom (*Genista monspessulana*) and gorse (*Ulex europaeus*) threaten the integrity of swamp communities by outcompeting native species and changing the structure of vegetation associations. Pest plant control will target the areas where ecological values are at the most risk. Control methods appropriate for use in these sensitive areas will be used to avoid inadvertently impacting the flora and fauna species they are intended to benefit.

Healthy swamps contain a diversity of plants growing in different layers. Prescribed fire can be used as a tool to maintain habitat diversity and encourage natural variance in plant cover and age class. However, if pest plants are not effectively managed before fire they may invade further into swamps. Grazing by kangaroos can also have a detrimental impact on vegetation recovery post-fire. Kangaroo management will be undertaken where necessary as outlined in Theme 1.

Fleurieu Peninsula Swamps have been a focus for research, restoration and community involvement for decades. Collaborating and supporting researchers, environmental non-government organisations, local government, land managers, volunteers and other agencies will be crucial to ensure ongoing outcomes for the protection of swamps continues.

Monitoring ecosystem health, including hydrology and threatened species populations will be important for determining required management actions for achieving long-term conservation outcomes.

Objective

Maintain a healthy wetland ecosystem and enhance habitat for species of conservation significance.

Strategies

- Monitor populations of threatened flora and fauna to inform species recovery.
- Integrate habitat restoration with revegetation efforts, weed management programs and species recovery plans.
- Gain a better understanding of surface and groundwater requirements of swamps to inform restoration programs and plan for mitigating impacts from climate change.
- Restore hydrological regimes to reinstate or preserve the water requirements of swamps where adverse impacts to other conservation values can be avoided.
- Undertake strategic revegetation to buffer swamps, establish key plant species and extend habitat for key fauna species including the Mount Lofty Ranges southern emu-wren (*Stipiturus malachurus intermedius*) and southern brown bandicoot (*Isoodon obesulus obesulus*).
- Monitor the impacts of pest plants, climate change and environmental conditions, and implement control in areas where ecological values are threatened. Control methods applied must be appropriate for use in wetland environments and take into account unintended consequences.
- Implement western grey kangaroo (*Macropus fuliginosus*) management programs where total grazing pressure indicates adverse impacts on ecological values. Consider commercial management options in consultation with the kangaroo industry.
- Maintain relationships with planning authorities and land managers for opportunities to influence external threats to swamps such as changes in land use, water diversion and water allocation.
- Use prescribed burning within an adaptive experimental framework to improve knowledge of appropriate fire regimes for this habitat type, to enhance its quality and support the protection of life, property and ecological values across the landscape.
- Continue to collaborate with researchers, environmental groups, government agencies, land managers and volunteers to achieve ecological outcomes and foster community stewardship of the parks.
- Refer to actions identified in the *Conservation Advice for the Swamps of the Fleurieu Peninsula ecological community* (DE, 2013) to stop the decline and support the recovery of Fleurieu Peninsula Swamps.

Theme 3: Visitor management

Central Fleurieu Peninsula parks are outstanding natural places with picturesque vegetated hilltops, steep slopes, water-lined valleys and an abundance of native wildlife. A number of these parks provide opportunities for people to experience and appreciate nature through low-impact activities.

The Heysen Trail traverses Myponga Conservation Park to Kyeema Conservation Park via Yulte, Finniss and Mount Magnificent conservation parks. Hikers are restricted to day walks or section-hiking as there are no camping facilities provided in any of the parks. Trails in other parks, including Bullock Hill, Cox Scrub, Mount Billy, Nixon-Skinner, Scott and Spring Mount conservation parks provide additional opportunities for bushwalking, birdwatching, and nature appreciation. New trails may be considered in the future to expand bushwalking opportunities or to redirect people for ecological reasons. Any new visitor facilities or upgrades in the conservation parks will be small-scale and designed to support low-impact visitation. Basic car parks may be considered in strategic locations in response to safety issues from visitors parking on road verges in order to access parks.

Hindmarsh Valley National Park is a new park with high conservation values and low visitation. Basic car parks will be provided for visitors to access existing management tracks in the park. The development of mountain bike trails was originally proposed during establishment of the park, however this will not be progressed due to the risks to the high conservation values of the park. Therefore mountain biking will not be permitted in the park. Facilities for basic camping may be considered within Hindmarsh Valley National Park in the future as an opportunity for visitors to experience the natural beauty of the park. Any future

development of visitor facilities including campsites would be subject to detailed planning and assessment of the environmental and visitor risks, impacts to cultural sites and restoration programs, and site suitability with regard to topography and access requirements.

Consultation with park neighbours and the community would be undertaken before the development of any campsites is authorised.

Visitor impacts should be monitored with appropriate action taken to ensure that visitation remains sustainable.

As outlined earlier in the plan, phytophthora is present in these parks and is a major risk to biodiversity. Park visitors and those undertaking operational activities such as track maintenance and development of infrastructure or facilities, will be required to adhere to strict phytophthora hygiene strategies. Visitors will be educated at strategic locations about the impacts of phytophthora, the importance of hygiene and the need to stay on designated tracks. If the spread of phytophthora is unable to be effectively managed, and it is likely to impact threatened species or critical habitat, visitation to areas may be restricted.

Aboriginal people occupied the land across the central Fleurieu for tens of thousands of years. The features across the landscape are linked and profoundly important to their cultural and spiritual connection to their traditional lands.

Several anthropological stories including the Tjilbruke Dreaming Story and the Yurrebilla Dreaming are associated with the region, and the Mount Lofty Ranges more broadly. Areas within the parks containing natural resources such as permanent water supported Aboriginal people and were often favoured areas to camp. No large-scale cultural heritage surveys have been undertaken in these parks, however it is highly likely that they contain Aboriginal archaeological sites, objects or burials. Ensuring sites are protected from impacts associated with public visitation, conservation programs, development or park maintenance activities will be achieved in consultation with First Nations peoples, particularly Peramangk and Kaurna.

All Aboriginal sites, objects and remains are protected from damage, disturbance or interference by the *Aboriginal Heritage Act 1988*, regardless of whether they are known in the Register of Aboriginal Sites and Objects.

Opportunities to recognise Aboriginal culture and support reconciliation by educating visitors and co-naming Hindmarsh Valley National Park with an Aboriginal name will be explored with First Nations peoples. Providing interpretive material at strategic locations will help create meaningful connections for park visitors to the natural and cultural values of the parks.

Objective

Provide low-impact opportunities for recreation and experiences in nature where risks to ecological values can be minimised.

Strategies

- Maintain existing infrastructure including car parks, signage, tracks and walking trails including sections of the Heysen Trail, to support low-impact activities such as bushwalking and nature appreciation.
- Ensure park visitors, private contractors and parks staff are aware of and adhere to phytophthora hygiene strategies to prevent its spread.
- Establish basic car parks in Hindmarsh Valley National Park at entrances off Nettle Hill and McEwin roads.
- Monitor community sentiment and visitation to Hindmarsh Valley National Park to assess the demand for further facilities. Consider future development of basic campsites and day visitor areas, including facilities such as shelters and toilets, if the level of demand shows a need.
- Monitor areas in the parks used by the public. Take appropriate action where impacts on ecological values are unsustainable. Consider trail closures or restricting access to areas where phytophthora is unable to be effectively managed.
- Work with First Nations to ensure cultural sites are protected from impacts associated with activities that occur in the parks.
- Provide interpretive material to facilitate appreciation of the ecological significance of the parks and to raise awareness of Aboriginal culture and heritage. Work in collaboration with First Nations and key stakeholders to develop key messages.

References

Barnett, S. & Rix, R. (2006) Southern Fleurieu Groundwater Assessment. South Australia. Report DWLBC 2006/24, Department of Water, Land and Biodiversity Conservation Adelaide.

Department of the Environment (2013). Approved Conservation Advice for the Swamps of the Fleurieu Peninsula ecological community. Canberra: Department of the Environment.

Appendix 1

Threatened flora species

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Acacia dodonaeifolia	Hop-bush wattle		*R*												✓			
Allocasuarina robusta	Mount Compass oak-bush	*EN*	*E*					✓	✓								✓	
Amphibromus archeri	Pointed swamp wallaby-grass		*R*						✓								✓	
Anogramma leptophylla	Annual fern		*R*			✓			✓									
Austrostipa breviglumis	Cane spear-grass		*R*								✓				✓			
Blechnum nudum	Fishbone water-fern		*R*				✓		✓							✓		
Boronia parviflora	Swamp boronia		*R*		✓												✓	
Caladenia argocalla	White beauty spider-orchid	*EN*	*E*		✓													
Caladenia leptochila ssp. leptochila	Narrow-lip spider-orchid		*R*	✓									✓		✓			
Caladenia pusilla	Pigmy aladenia		*R*	✓					✓						✓		✓	
Caladenia reticulata	Veined spider-orchid		*R*	✓	✓							✓			✓		✓	
Caladenia valida	Robust spider-orchid		*E*														✓	
Caleana major	Large duck-orchid		*V*		✓						✓						✓	
Calochilus paludosus	Red beard-orchid		*V*								✓						✓	
Cardamine paucijuga	Annual bitter-cress		*R*						✓									
Cladium procerum	Leafy twig-rush		*R*			✓			✓									
Coronidium gunnianum	Pale everlasting		*E*			✓				✓								
Correa aemula	Hairy correa		*R*				✓		✓				✓			✓		
Correa calycina var. calycina	Hindmarsh correa	*VU**	*V*						✓				✓					
Corybas X dentatus	Finniss helmet-orchid	*VU*	*E*												✓			
Corybas unguiculatus	Small helmet-orchid		*R*											✓				
Crassula sieberiana	Sieber's crassula		*E*						✓						✓			
Crassula peduncularis	Purple crassula		*R*		✓	✓												
Cyperus sanguinolentus	Dark flat-sedge		*R*	✓														
Cryptostylis subulata	Moose orchid		*V*		✓												✓	
Cycnogeton alcockiae	Alcock's water-ribbons		*R*							✓							✓	
Deyeuxia densa	Heath bent-grass		*R*		✓					✓	✓					✓		
Dianella longifolia var. grandis	Pale flax-lily		*R*						✓		✓							
Diuris behrii	Behr's cowslip orchid		*V*		✓						✓							
Diuris brevifolia	Short-leaf donkey-orchid		*E*	✓	✓					✓		✓	✓					
Drosera binata	Forked sundew		*R*														✓	
Echinopogon ovatus	Rough-beard grass		*R*							✓	✓							

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Elatine gratioloides	Waterwort		*R*		✓												✓	
Eucalyptus dalrympleana ssp. dalrympleana	Candlebark gum		*R*				✓			✓						✓		
Eucalyptus fasciculosa	Pink gum		*R*	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Eucalyptus paludicola	Mount Compass swamp gum	*EN*	*E*		✓						✓						✓	
Eucalyptus wimmerensis	Wimmera mallee box		*R*												✓			
Euphrasia collina ssp. osbornii	Osborn's eyebright	*EN*	*E*		✓												✓	
Isoetes drummondii ssp. drummondii	Plain quillwort		*R*		✓													
Gastrodia sesamoides	Potato orchid		*R*				✓			✓						✓		
Gleichenia microphylla	Coral fern		*R*				✓	✓	✓								✓	
Glycine latrobeana	Clover glycine	*VU*	*V*						✓		✓	✓						
Gonocarpus micranthus ssp. micranthus	Creeping raspwort		*R*				✓		✓								✓	
Hibbertia tenuis		*CR*	*E*														✓	
Hydrocotyle crassiuscula	Spreading pennywort		*R*						✓		✓							
Hypericum japonicum	Matted St John's wort		*R*				✓		✓								✓	
Hypolepis rugosula	Ruddy ground-fern		*R*				✓		✓								✓	
Juncus homalocaulis	Wiry rush		*V*	✓														
Lachnagrostis semibarbata var. filifolia	Narrow-leaf blown-grass		*R**			✓												
Lagenophora sublyrata	Slender bottle-daisy		*V**								✓	✓				✓		
Lepidosperma avium	Central Australian rapier-sedge		*R*							✓								
Leucopogon hirsutus	Hairy beard-heath		*R*							✓							✓	
Luzula ovata	Clustered wood-rush		*R*						✓	✓								
Lycopodiella lateralis	Slender clubmoss		*R*														✓	
Lycopodiella serpentina	Bog clubmoss		*E*														✓	
Machaerina acuta	Pale twig-rush		*R*						✓								✓	
Machaerina gunnii	Slender twig-rush		*R**				✓		✓									
Meionectes brownii	Swamp raspwort		*R**						✓									
Melaleuca squamea	Swamp honey-myrtle		*R*					✓			✓						✓	
Microtis oblonga	Sweet onion-orchid		*R*		✓						✓						✓	
Microtis rara	Sweet onion-orchid		*R*						✓								✓	
Montia australasica	White purslane		*R*							✓								
Myriophyllum amphibium	Broad milfoil		*R*				✓	✓									✓	
Myriophyllum integrifolium	Tiny milfoil		*R*		✓						✓							
Olearia glandulosa	Swamp daisy-bush		*V*														✓	
Paracaleana disjuncta	Black-beak duck-orchid		*E*		✓													
Paracaleana minor	Small duck-orchid		*V*		✓													

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Pentapogon quadrifidus var. quadrifidus	Five-awn spear-grass		*R*								✓							
Philotheca angustifolia ssp. angustifolia	Narrow-leaf wax-flower		*R*		✓										✓			
Phyllangium distylis	Tiny mitrewort		*R*		✓													
Phylloglossum drummondii	Pigmy clubmoss		*R*		✓						✓							
Poa umbricola	Shade tussock-grass		*R*						✓									
Potamogeton ochreatus	Blunt pondweed		*R*														✓	
Prasophyllum australe	Austral leek-orchid		*R*		✓												✓	
Prasophyllum murfetii	Murffet's leek-orchid	*CR*	*E*														✓	
Prasophyllum pallidum	Pale leek-orchid	*VU*	*R*												✓			
Prasophyllum tortilis	Goldsack's leek-orchid		*E**														✓	
Prostanthera chlorantha	Green mintbush		*R*										✓		✓			
Pteris tremula	Tender brake		*R*						✓									
Pterostylis bryophila	Hindmarsh Valley greenhood	*CR*	*E*						✓		✓							
Pterostylis foliata	Slender greenhood		*R*								✓							
Pterostylis uliginosa			*E*					✓										
Ptilotus erubescens	Hairy-tails		*R*	✓	✓										✓			
Pultenaea dentata	Clustered bush-pea		*V*														✓	
Pultenaea graveolens	Scented bush-pea		*R*													✓		
Ranunculus papulentus	Large river buttercup		*V*														✓	
Rytidosperma laeve	Smooth wallaby-grass		*R*	✓														
Rytidosperma tenuius	Short-awn wallaby-grass		*R*							✓								
Schizaea bifida	Forked comb-fern		*V*								✓						✓	
Schoenus discifer	Tiny bog-rush		*R*								✓							
Schizaea fistulosa	Narrow comb-fern		*V*														✓	
Schoenus laevigatus			*R*						✓									
Schoenus latelaminatus	Medusa bog-rush		*V*		✓						✓							
Schoenus lepidosperma ssp. lepidosperma	Slender bog-rush		*R*				✓		✓	✓	✓						✓	
Scutellaria humilis	Dwarf skullcap		*R*			✓			✓		✓		✓		✓	✓		
Senecio pinnatifolius var. pinnatifolius			*R*						✓		✓							
Sphaerolobium minus	Leafless globe-pea		*R*				✓				✓						✓	
Spiranthes australis	Austral lady's tresses		*R*														✓	
Sprengelia incarnata	Pink swamp-heath		*R*		✓					✓							✓	
Stellaria angustifolia ssp. tenella	Swamp starwort		*R*						✓									
Stylidium beaugleholei	Beauglehole's trigger-plant		*R*		✓						✓							

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Thelymitra carnea	Small pink sun-orchid		*R*		✓													
Thelymitra cyanea	Veined sun-orchid		*E*														✓	
Thelymitra flexuosa	Twisted sun-orchid		*R*								✓				✓			
Thelymitra holmesii	Blue star sun-orchid		*V*						✓								✓	
Thelymitra grandiflora	Great sun-orchid		*R*	✓	✓													
Thelymitra inflata	Plum sun-orchid		*V*							✓								
Thelymitra ixioides	Spotted sun-orchid		*E**		✓													
Thelymitra X merraniae			*E*														✓	
Tricostularia pauciflora	Needle bog-rush		*E*								✓							
Utricularia lateriflora	Small bladderwort		*V*						✓		✓						✓	
Veronica derwentiana ssp. anisodonta	Kangaroo Island speedwell		*R*				✓			✓								
Veronica derwentiana ssp. homalodonta	Mount Lofty speedwell	*CR*	*E*				✓			✓						✓		
Viminaria juncea	Native broom		*R*		✓		✓	✓	✓	✓	✓						✓	
Wurmbea latifolia ssp. vanessae	Broad-leaf nancy		*R*								✓							
Xanthorrhoea semiplana ssp. tateana	Tate's grass-tree		*R*		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		
Xanthosia tasmanica	Southern xanthosia		*R*				✓		✓	✓	✓					✓	✓	
Xyris operculata	Tall yellow-eye		*R*				✓	✓									✓	
Zieria veronicea ssp. veronicea	Pink zieria		*R*	✓	✓										✓			

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[2] *National Parks and Wildlife Act 1972* (South Australia). E – Endangered, V – Vulnerable, R – Rare.

Appendix 2

Threatened fauna species

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Anhinga novaehollandiae	Australasian darter		R											✓				
Antechinus flavipes	Yellow-footed antechinus		V		✓				✓	✓	✓	✓	✓	✓		✓	✓	
Biziura lobata menziesi	Musk duck		R		✓						✓							
Bubulcus ibis coromandus	Eastern cattle egret		R			✓												
Cereopsis vaehollandiae novaehollandiae	Cape barren goose		R	✓														
Cinclosoma punctatum anachoreta	Spotted quailthrush (MLR)	CR	E													✓		
Corcorax melanorhamphos	White-winged chough		R							✓					✓			
Coturnix ypsilophora australis	Brown quail		V	✓											✓			
Eulamprus heatwolei	Yellow-bellied water skink		V		✓				✓				✓			✓		
Falco peregrinus macropus	Peregrine falcon		R	✓	✓						✓	✓			✓		✓	✓

Species	Common name	*EPBC Act*[1]	*NPW Act*[2]	Bullock Hill Conservation Park	Cox Scrub Conservation Park	Finniss Conservation Park	Gum Tree Conservation Park	Hesperilla Conservation Park	Hindmarsh Valley National Park	Kyeema Conservation Park	Mount Billy Conservation Park	Mount Magnificent Conservation Park	Myponga Conservation Park	Nixon-Skinner Conservation Park	Scott Conservation Park	Spring Mount Conservation Park	Stipiturus Conservation Park	Yulte Conservation Park
Falco subniger	Black falcon		R	✓	✓									✓	✓			
Falcunculus frontatus frontatus	Eastern shriketit		R	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	
Gallinago hardwickii	Latham's snipe		**R**														✓	
Hieraaetus morphnoides	Little eagle		V		✓										✓			
Hylacola pyrrhopygia parkeri	Chestnut-rumped heathwren	EN	E		✓		✓			✓		✓	✓					✓
Isoodon obesulus obesulus	Southern brown bandicoot	EN	V	✓	✓		✓		✓	✓	✓		✓	✓		✓		✓
Lewin pectoralis pectoralis	Lewin's rail		V					✓									✓	
Lichmera indistincta indistincta	Brown honeyeater		R		✓													
Lophoictinia isura	Square-tailed kite		E							✓								
Melanodryas cucullata cucullata	Hooded robin		R	✓	✓				✓						✓			
Myiagra inquieta	Restless flycatcher		R	✓	✓				✓		✓			✓	✓	✓		
Neophema chrysostoma	Blue-winged parrot		V		✓							✓				✓		
Neophema elegans elegans	Elegant parrot		R	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Parvipsitta pusilla	Little lorikeet		E	✓											✓			
Petroica boodang boodang	Scarlet robin		R	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Petroica phoenicea	Flame robin		V						✓			✓			✓	✓	✓	
Pseudophryne bibronii	Brown toadlet		R						✓	✓		✓		✓	✓		✓	
Rattus lutreolus	Swamp rat		R		✓				✓	✓	✓							
Stagonopleura bella samueli	Beautiful firetail (MLR, KI)	EN	SP		✓					✓			✓			✓		✓
Stagonopleura guttata	Diamond firetail		V	✓	✓										✓			
Stictonetta naevosa	Freckled duck		V													✓		
Stipiturus malachurus intermedius	Mount Lofty Ranges southern emu-wren	EN	E		✓			✓									✓	
Trichosurus vulpecula	Common brushtail possum		R		✓					✓	✓	✓	✓	✓	✓			
Turnix varius varius	Painted buttonquail		R	✓	✓						✓	✓			✓			
Varanus rosenbergi	Rosenberg's goanna		V		✓				✓		✓		✓			✓		✓
Zanda funerea whiteae	Yellow-tailed black cockatoo		V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zapornia tabuensis	Spotless crake		R		✓													
Zoothera lunulata halmaturina	Bassian thrush	EN	SP		✓		✓		✓	✓	✓	✓	✓			✓	✓	

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For further information please contact:

Department for Environment and Water. Phone Information Line (08) 8204 1910, or see SA White Pages for your local Department for Environment and Water office.

Recognition of Aboriginal Culture:

Aboriginal Australians have rights to maintain, control, protect and develop their intellectual property over cultural heritage, traditional knowledge and traditional cultural expressions.

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