

Eastern Eyre Peninsula Parks

Management Plan 2014

Managed to conserve remnant areas of mallee vegetation and contribute to the conservation of critical wildlife habitats on the Eyre Peninsula.

- Munyaroo Conservation Park
- Ironstone Hill Conservation Park
- Lake Gilles Conservation Park
- Malgra Conservation Park
- Heggaton Conservation Park
- The Plug Range Conservation Park
- Sheoak Hill Conservation Park



**Government
of South Australia**

Department of Environment,
Water and Natural Resources

Minister's Foreword

The Eastern Eyre Peninsula Parks Management Plan will guide the integrated management of eight important conservation parks on the Eyre Peninsula: Munyaroo, Ironstone Hill, Lake Gilles, Malgra, Heggaton, The Plug Range and Sheok Hill Conservation Parks.

These parks are integral to the culture of traditional owners and their rugged natural beauty is recognised by many people who live in the area. They also contain significant areas of remnant vegetation and a diverse range of habitats that provide critical refuge and dispersal corridors for many endemic species, some of which are threatened.

Neighbours to these parks have made a significant contribution to their conservation over many years. The plan recognises that continued collaboration between landholders will be essential to ensure the protection of these parks in the long term.

I thank those who have contributed to the development of this plan and look forward to the community's ongoing support for its implementation.

I now formally adopt the Eastern Eyre Peninsula Parks Management Plan under section 38 of the *National Parks and Wildlife Act 1972*.



The Hon Ian Hunter MLC

Minister for Sustainability,
Environment and Conservation





Directions for management

The Eastern Eyre Peninsula Parks Management Plan is the first management plan for a network of seven conservation parks located on South Australia's Eyre Peninsula. These parks contain significant areas of remnant mallee vegetation that provide important semi-arid refuge and dispersal corridors for nationally-threatened and endemic species. These areas are particularly important within a fragmented landscape because they support the survival and resilience of species that are under pressure from a changing environment.

The plan outlines how these parks contribute to the conservation goals of the Eyre Peninsula and South Australian Arid Lands Natural Resources Management Plans (EP NRM Board, 2009; SAAL NRM Board, 2010). It includes strategies to help conserve mallee vegetation and other wildlife habitats. It also outlines how the local community and neighbouring land managers can contribute to the protection of biodiversity values. Setting priorities and implementing the strategies will be coordinated by the Department of Environment, Water and Natural Resources.

The management plan was adopted on 22 January 2014, subject to any native title rights or interests that may continue to exist in relation to the land. The Gawler Ranges People are the native title holders of the Gawler Ranges area which is situated to the northwest of these parks. The Gawler Ranges People have a formal advisory role over a portion of Lake Gilles Conservation Park. The parks also fall within the Barngarla native title claim area.

This management plan meets the requirements of section 38 of the *National Parks and Wildlife Act 1972*.

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Park significance and purpose

The long-term protection and enhancement of the parks begins with an understanding of their individual value and their role in assisting the conservation of biodiversity across the Eastern Eyre Peninsula.

Munyaroo Conservation Park, Ironstone Hill Conservation Park, Lake Gilles Conservation Park, Malgra Conservation Park, Heggaton Conservation Park, The Plug Range Conservation Park and Sheoak Hill Conservation Park have been constituted under the *National Parks and Wildlife Act 1972*. They are located on the eastern side of South Australia's Eyre Peninsula (Figure 1).

Parks are fundamental to Aboriginal law, culture and beliefs, and Aboriginal groups have strong connections with 'country'. The parks protect important aspects of cultural significance, some of which may be undocumented.

Whilst much of the Eyre Peninsula has been cleared for broad-acre cropping, there are extensive areas of remnant vegetation associated with undulating plains, rises, inland lakes, coastal dunes and shorelines. These landforms provide conditions for a diverse range of plant and animal species, many of which do not occur elsewhere (DEH, 2002). Although fragmented, there are over 400 000 ha of remnant vegetation in the region located in parks and on private property.

The Eyre Peninsula has a largely Mediterranean climate, however, there are extensive arid areas, typical of inland South Australia, further to the north. The parks contain habitats with characteristics from both the arid and Mediterranean climates. Consequently, the parks may provide opportunities for some species to adapt to a changing climate by progressively moving towards preferred habitats. The remnant vegetation across the Eyre Peninsula is adjacent to a strategic biodiversity conservation corridor called the *East meets West NatureLink* (DEH 2008).

Munyaroo Conservation Park (20 139 ha) consists of three separate areas in close proximity to each other on the Spencer Gulf coastline. They provide an important habitat link between the coastal vegetation and inland mallee of the peninsula. The two large coastal blocks include low impact sandy beaches with an intertidal zone of mangrove and samphire communities. These communities provide habitat for shorebirds such as plovers, terns and the Sooty Oystercatcher which is listed as rare under the *National Parks and Wildlife Act*. Behind the coastal dune system are low open woodlands of Western Myall and False Sandalwood, with a Bluebush and Bladder Saltbush understorey. The malle and saltbush associations contain populations of the Yellow Swainson-pea which is listed as vulnerable under the *National Parks and Wildlife Act* and the Dwarf Four-toed Slider which is listed as rare under the act.

Ironstone Hill Conservation Park (19 650 ha) is particularly significant for the protection of sandy dunes, which are preferred habitat of the endangered Sandhill Dunnart. The park is largely mallee vegetation, and protects plant species including the Desert Greenhood and Sandalwood which are listed as vulnerable under the *National Parks and Wildlife Act*.

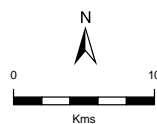
Lake Gilles Conservation Park (65 528 ha) contains an ephemeral lake system fringed by samphire communities. The park provides habitat for the Malleefowl, Slender-billed Thornbill, Thick-billed Grasswren and migratory waders. Extensive but patchy mallee communities on the eastern plains of the park include Western Myall and associated chenopod shrubland.

Four smaller parks are situated to the west of Munyaroo Conservation Park and to the south of Lake Gilles and Ironstone Hill Conservation Park. These parks are Heggaton Conservation Park (6 476 ha), The Plug Range Conservation Park (2 582 ha), Sheoak Hill Conservation Park (2 427 ha) and Malgra Conservation Park (66 ha). These parks are dominated by relatively undisturbed mallee forest, and woodland associations with a Melaleuca shrub understorey. They provide important habitat for Malleefowl populations and contain significant species including Gilbert's Whistler, Bentham's Goodenia and the Six-nerve Spine-bush which are listed as rare under the *National Parks and Wildlife Act*.



Figure 1
Eastern Eyre Peninsula Parks
Location

- Sealed Road
- Eastern Eyre Peninsula Parks



Setting the management direction

The Eastern Eyre Peninsula Parks will be managed to enhance a regional network of natural species refuges.

What are we protecting?

The Eastern Eyre Peninsula Parks are valued for protecting:

- significant areas of remnant vegetation that contribute to the regional conservation goals of the East meets West NatureLink;
- areas of mallee habitat including those within Munyaroo Conservation Park that are critical for the survival of Malleefowl populations – a species that is listed as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*;
- areas of sandy dune habitat within Ironstone Hill Conservation Park that are critical for the survival of Sandhill Dunnart populations - a species that is listed as endangered under the *Environment Protection and Biodiversity Conservation Act*;
- a diverse range of vegetation types and age classes which provide habitat for an extensive range of bird species, particularly within Munyaroo Conservation Park;
- a network of ephemeral lakes within Lake Gilles Conservation Park;
- a diverse range of flora and fauna including several that are threatened, and
- a network of refuges that enhance species resilience to climate change.

What are the challenges?

Key challenges in the protection of the Eastern Eyre Peninsula Parks are:

- ensuring that management decisions are based on the best available knowledge and information;
- implementing management regimes that respond to flora and fauna population dynamics;
- reducing the ecological impact of pest plants and animals;
- maintaining the natural ecological influence of fire within a fragmented and modified landscape;
- encouraging land management activities on agricultural land and mining tenements that complement the goals of the parks;
- facilitating community involvement in conservation programs;
- maintaining landscape connectivity across the peninsula, and
- enhancing species resilience to the effects of climate change.





Management themes and priorities

This section of the plan discusses important issues within two key management themes and sets out management priorities.

Theme 1: Conserving biodiversity

These conservation parks contain relatively large and intact areas of native vegetation that serve as refuges for plant and animal populations (Brandle, 2010). Properties adjacent to the parks also have large areas of remnant vegetation. Much of this adjacent vegetation is protected through Vegetation Heritage Agreements, and is managed to complement productive agricultural land. This often results in remnant vegetation being interconnected across several properties, thereby facilitating species movement across the region. These parks are also adjacent to the eastern portion of the Easts meets West NatureLink - a corridor of strategic importance for biodiversity conservation that stretches from the Eyre Peninsula to the border between South Australia and Western Australia.

Native species require healthy habitats, as well as protection from predation (and competition for resources) by introduced animals. Threatened species, including the Malleefowl and Sandhill Dunnart, rely on remnant vegetation to provide viable habitats (Churchill, 2001; Benshemesh, 2007). Wildlife in the region is, however, vulnerable to predation by foxes and cats. Many native herbivores also compete for food with goats and rabbits. Some pest species such as foxes and cats are widespread while others such as rabbits and goats are more localised but can have a significant impact particularly on rare or threatened plant species. In addition, weeds such as Horehound contribute to habitat degradation. Managing introduced plants and animals, both within and adjacent to the parks, will maximise habitat availability and condition for threatened species.

High populations of some native animals can also have significant impacts on biodiversity. An annual assessment of total grazing pressure is used to indicate when the control of over-abundant species is required. For example, the over-abundance of kangaroos may result in negative impacts on park conservation values. Strategic culling of kangaroos will be implemented if the assessment of grazing pressure determines that control measures are warranted, in accordance with section 38(10)(a) of the *National Parks and Wildlife Act*. Kangaroo management programs may consider commercial options for the utilisation of carcasses.

Fire is a critical part of the evolution and dynamics of mallee vegetation, having a major role in the regeneration and dispersal of fire-



adapted plant and animal species. However, these parks are situated within a landscape comprising fragmented native vegetation, where natural fire events are unlikely to occur. A lack of fire, or even burning at the wrong intensity, patch size, etc., may contribute to a decline in the condition of the ecosystem. In South Australia, fire management plans are prepared for specific regions, outlining management actions to minimise risks to life, property and the environment.

Future research and monitoring can also help improve fire management and other land management practices, to better meet conservation objectives in these parks. Universities, non-government organisations and government agencies undertake research on conservation assets in these parks, and this helps build an understanding of these assets and threats to them.

These management activities are coordinated with park neighbours and regularly reviewed to ensure that they are refined and improved in response to new knowledge or changes to the environment.

Objectives and strategies

Improve the condition of native vegetation and conserve viable populations of threatened species with a particular focus on the Malleefowl and Sandhill Dunnart.

- Monitor the condition of native vegetation, Malleefowl populations and Sandhill Dunnart populations.
- Conduct coordinated pest plant and animal control programs to improve the condition of native vegetation, Malleefowl populations and Sandhill Dunnart populations.
- Assess total grazing pressure and implement strategies including a kangaroo management program if necessary to avoid the decline of native vegetation and threatened species.
- Undertake prescribed burning in accordance with the regional fire management plan.
- Conduct regular inspections to detect the introduction of any new pest plant or animal species and respond to threats within a regional program for the management of priority pest plants and animal species.
- Develop and implement a regional fire management plan that provides a strategic approach to the protection of life, property and the environment.



Theme 2: Working across boundaries

Whilst relatively few people visit these parks, they are an important community asset. The parks, in conjunction with other remnant vegetation, make a significant contribution to regional conservation goals. These natural areas can also help mining companies and people who live nearby to appreciate their local biodiversity and understand why it should be conserved.

A mutually beneficial relationship can be established between the parks and adjacent landholders through a cooperative effort. For example, pest plant and animal control programs, fire management and the management of over-abundant species within the parks can assist in maintaining productivity on adjacent agricultural land. This approach to conservation is a key element of the Eyre Peninsula and South Australian Arid Lands Natural Resources Management Plans (EP NRM Board, 2009; SAAL NRM Board, 2010).

All park neighbours can contribute to park management goals. Neighbours to the parks include OneSteel Manufacturing Pty Ltd's mining business, Arrium Mining, which operates several large open-cut iron ore mines in the Middleback Ranges to the east of Ironstone Hill Conservation Park, and Ecological Horizons Pty Ltd, which owns the Secret Rocks pastoral lease (managed as a nature reserve) to the west of Ironstone Hill Conservation Park.

The benefits of a cooperative approach between neighbours are demonstrated through the Middleback Alliance, which is a formal partnership between the Department of Environment, Water and Natural Resources, Arrium Mining and Ecological Horizons. The Middleback Alliance seeks to achieve complementary land use through coordinated management activities that extend beyond park boundaries.

Petroleum, geothermal and mineral exploration (as well as mining) may take place in parks proclaimed under section 43 of the *National Parks and Wildlife Act*, subject to the granting of a tenement under the *Mining Act 1971* or the *Petroleum and Geothermal Energy Act 2000*. Those portions of the parks proclaimed under section 43 are detailed in Figure 2. A gypsum strip mining operation in the south west portion of Lake Gilles Conservation Park is the only mining operation within these parks, however, mineral exploration has occurred from time to time.

The Gawler Ranges People are the native title holders of the Gawler Ranges region and have a formal advisory role over a portion of Lake Gilles Conservation Park.

Environmental impacts associated with mineral exploration and mining activities are managed through the *Mining Act*. Prior to commencement of any licensed mineral exploration or mining activities, a Program for Environment Protection and Rehabilitation (PEPR) must be prepared by the proponent and approved by the Minister for Mineral Resources and Energy. Depending on the nature and location of activities, the Minister for Sustainability, Environment and Conservation will also have a role in relation to the approval of the PEPR and the grant of any licence. The development of a PEPR, in consultation with traditional owners and government, ensures that the licensed mineral exploration activities are consistent with the objectives of this plan.



Environmental impacts associated with petroleum and geothermal activities are managed through the *Petroleum and Geothermal Energy Act*. Prior to the commencement of any regulated activities under this act, a Statement of Environmental Objectives (SEO) must be prepared by licensees. The SEO is required to address the potential environmental impacts and risks associated with the proposed activities. The SEO must be prepared on the basis of a detailed Environmental Impact Report (EIR) and in consultation with traditional owners, relevant landowners, government agencies and other stakeholders that are likely to be impacted on by the proposed regulated activities.

The Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) is responsible for monitoring the activities of companies operating under the *Mining Act* and the *Petroleum and Geothermal Energy Act*. Companies are required to report on compliance and assessments are undertaken to ensure that the requirements for rehabilitation have been satisfied. These assessments are undertaken by DMITRE in conjunction with the Department of Environment Water and Natural Resources when the activities occur within parks. Rehabilitation requirements are outlined in a company's PEPR and enforced through the conditions in their activity approval. Typically these conditions will require restoration of impacted areas to a condition consistent with the prior land use and in a manner that will facilitate natural regeneration of vegetation and minimize visual impact. Rehabilitation should be progressive, and final rehabilitation should be completed immediately after completion of a program.

Through these processes, practices are established to avoid or restrict the environmental impact of resource development activities, and ensure the rehabilitation of disturbed sites. Proponents also have responsibilities for the protection of Aboriginal cultural values under the *Aboriginal Heritage Act 1988*.

Objectives and strategies

Facilitate and coordinate the contribution of the Gawler Ranges People, government agencies, adjoining landholders and mining companies to the protection of the parks.

- Encourage a cooperative approach to biodiversity conservation programs within and adjacent to the parks.
- Encourage research that helps develop an improved understanding of threats to park biodiversity values.
- Evaluate and, as appropriate approve petroleum and geothermal exploration, mineral exploration and mining activities that are consistent with the objectives of this management plan and;
 - address risks to natural and cultural values,
 - include plans that address site rehabilitation,
 - include effective biosecurity measures to address the risk of weed infestation and spread,
 - take all practicable measures to avoid damage to vegetation and the creation of tracks.
- Work with the mine operators and DMITRE to monitor likely effects from neighbouring mine operations and avoid or remedy impacts.

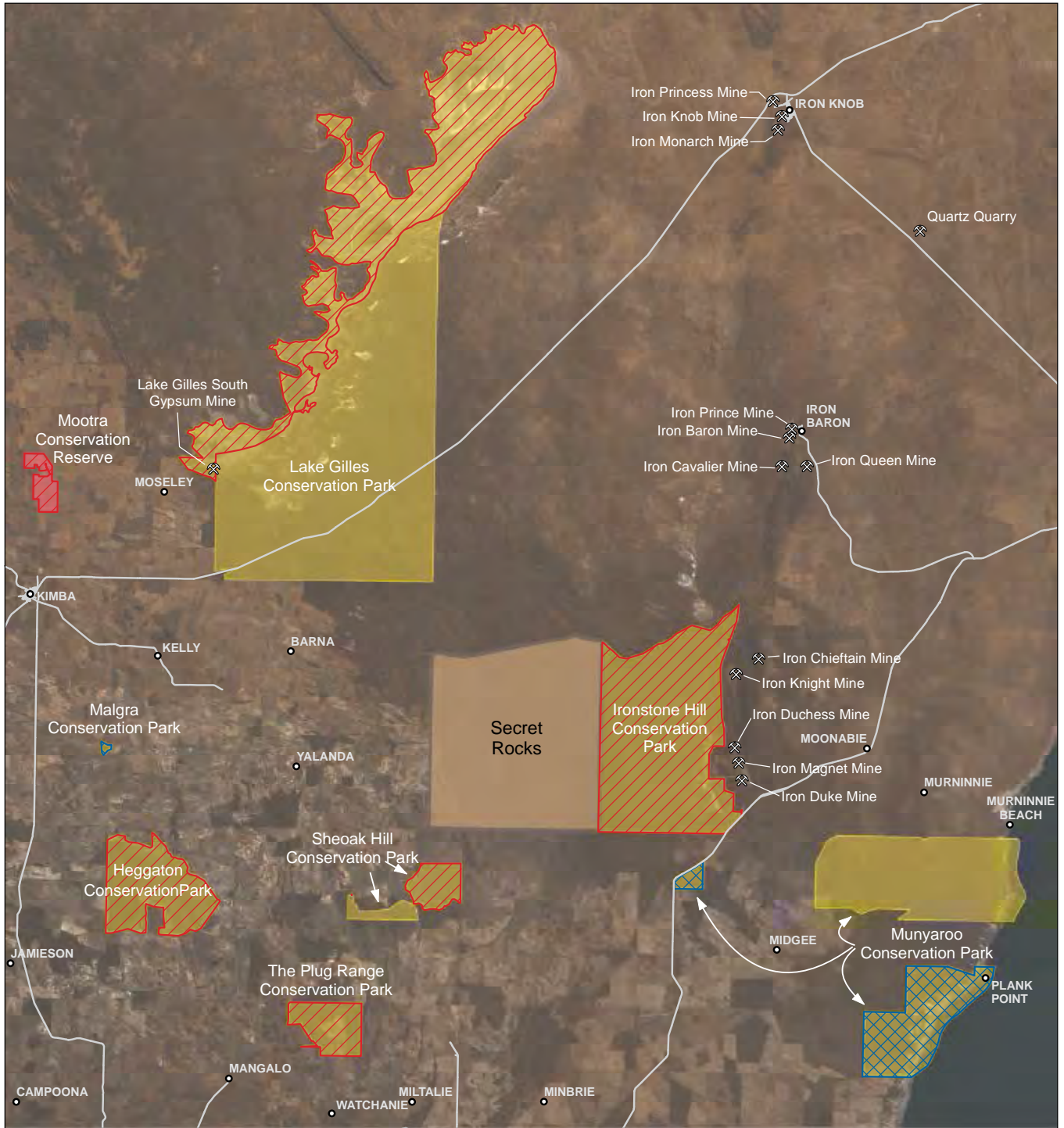
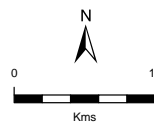


Figure 2
Eastern Eyre Peninsula Parks
Conservation and Mining

- Mine
- Sealed Road
- Conservation**
- Eastern Eyre Peninsula Parks
- Mootra Conservation Reserve
- Secret Rocks (private nature reserve)
- Exploration Access**
- Mineral and Petroleum/Geothermal
- Mineral Only



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