

Kingoonya District Plan

2021 - 2023



November 2022

Introduction

This plan provides an overview of the features of the Kingoonya district, the key opportunities and issues relating to landscape management, and priorities for the Kingoonya Landscape Group.

The Kingoonya district lies in the central-west area of South Australia, in the south west of the SA Arid Lands region. The district is generally flat to undulating and has a mixture of sand dune & sand plain country, stony country and salt lake environments. The district population is mainly concentrated in Roxby Downs & Woomera townships. Other population centres are the settlements of Andamooka, Pimba, Glendambo and Kingoonya. The bulk of the population is associated with mining and defence industries while majority of the land managed by the pastoral community. Evidence of Aboriginal occupation is widespread across the district and there are many culturally significant sites particularly around lakes and mound springs.

Linked bioregions: Bioregions are geographic areas defined by the combination of their climate, geology, landform patterns, ecological features and plant and animal communities. The Kingoonya district is primarily comprised of the **Gawler bioregion**, with an area of the Stony Plains bioregion in the central northern part of district, and small parts of Great Victoria Desert bioregion also present. The Gawler bioregion features calcrete plains, gypsum dune-fields and ranges that drain into terminal salt lakes.

Size: 76,394 km² (15% of the SAAL region)

Towns (population): Roxby Downs – 3884 Andamooka (2016 census) – 316 Woomera (2016 census) – 146 (increased since 2001) Kingoonya – ~13 (2016 census) Glendambo – 77 (2006) Tarcoola – 38 (2006 census)

Aboriginal Nations: Arabana (north-east), Kokatha (south-east), Gawler Ranges (south-west) and Antakirinja Matu – Yankunytjatjara (north-west).

Land use: Mining and energy, pastoralism (predominantly sheep), military, tourism, conservation (public and private lands), recreation, service centres, towns

Catchment and key waterways: Lake Eyre Basin (LEB) and part Lake Torrens catchment. Minor drainage into Lake Gairdner and other salt lakes to south. Upper portions of Margaret River and Chambers Creek feeding into Lake Eyre (Kati Thanda) South. No significant permanent waterways.

National Parks and Reserves: Part of Lake Gairdner National Park; part of Lake Torrens National Park

Key stakeholders:

- First Nations- Kokatha Aboriginal Corporation, Gawler Ranges Aboriginal Corporation, Arabana Aboriginal Corporation, Antakirinja Matu – Yankunytjatjara Aboriginal Corporation
- Lake Gairdner National Park Co-management Board
- National Parks and Wildlife Services (NPWS)
- Pastoral community & other landholders
- Mines- Oz Minerals, Peak Mining,
- Defence- Woomera Prohibited Area
- Bush Heritage Australia
- Arid Recovery

- Roxby Downs Council
- Ventia
- Andamooka Progress and Opal Miners Association
- Community and volunteer groups
- Town dwellers of Roxby Downs, Woomera, Andamooka, Glendambo, Kingoonya, Tarcoola
- Tourism- Flinders Ranges and Outback South Australia Tourism
- Local businesses and support organisations
- Local schools

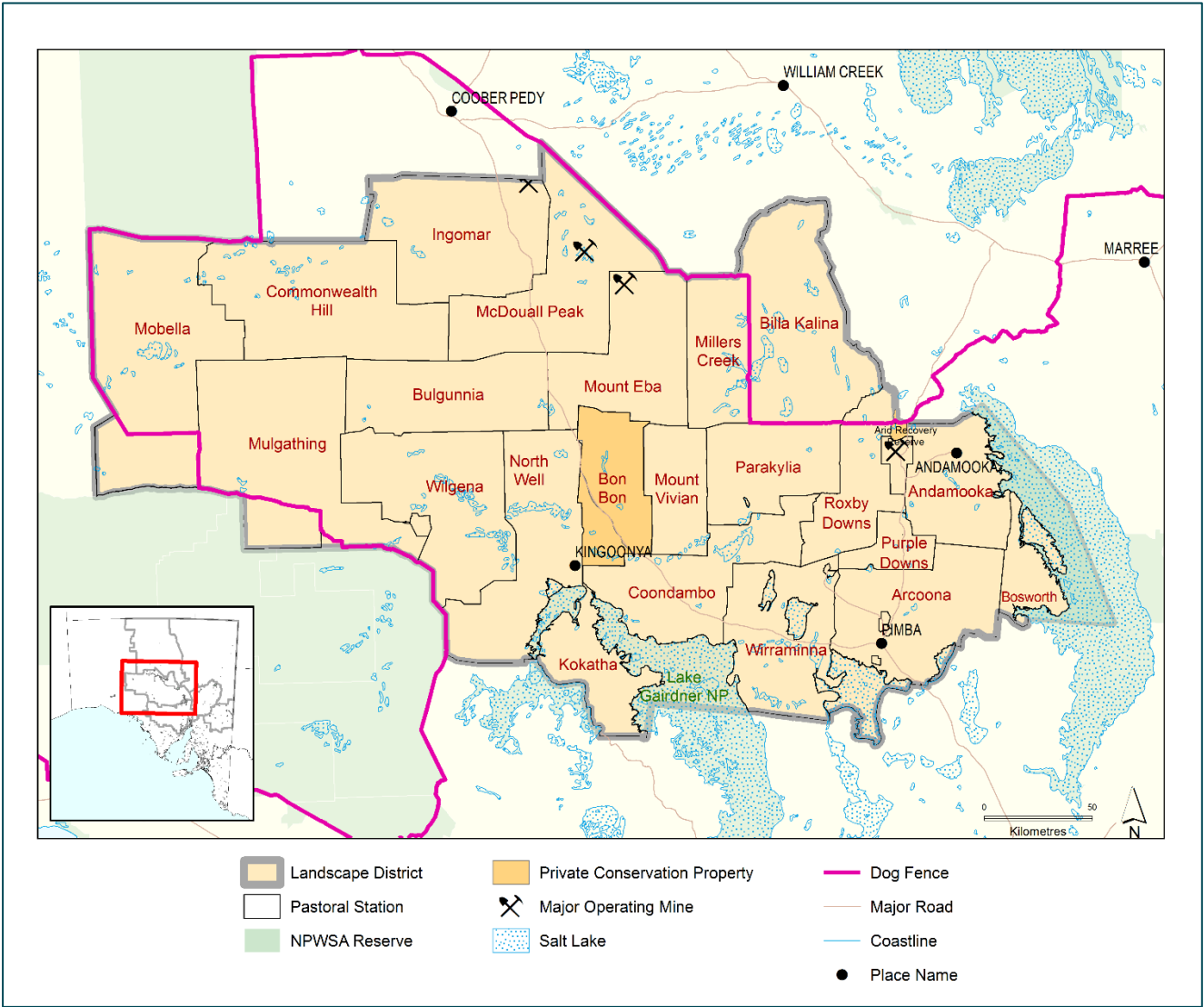


Figure 1: Map of the Kingoonya district

Role of the Board

Under the Landscape South Australia (LSA) Act 2019, the Board's role is to undertake, promote and integrate the management of natural resources. Particular reference is given to land management, water resource management and pest animal and plant control. The Board operates as the relevant authority for a range of water, land protection and animal and plant control activities and works with the community in delivering its responsibilities under the LSA Act. Its roles include education and awareness raising aimed at practice change and adoption, encouraging and supporting legislative compliance, and enforcement when needed.

Role of the Kingoonya Landscape Group

Landscape Groups are an important conduit for community input to landscape planning and design of the Board's programs. Groups work with local communities, to support the implementation of the Regional Landscape Plan and increase community awareness of Board programs within a Group's area.

Landscape Planning Framework



How this plan was developed

This plan was developed with involvement of the Kingoonya Landscape Group across a number of planning sessions in late 2021. Information was drawn from past planning documents, current projects and stakeholder knowledge.

Monitoring and Evaluation

This district plan will be revised each year with the Kingoonya Landscape Group to evaluate past actions and plan for the next year of activities.

SA Arid Lands regional priorities



CLIMATE RESILIENT REGION

Resilient landscapes, communities and enterprises are mitigating and adapting to climate change

- C1** Ensuring climate risk is embedded in all Board business
- C2** Providing land managers with the knowledge and skills they need to mitigate and adapt to climate change
- C3** Exploring adaptation pathways to ensure communities are climate resilient



WATER MANAGEMENT

The region's water resources are managed judiciously

- W1** Planning, research & leveraging infrastructure investment to support the judicious use of groundwater
- W2** Maintaining hydrogeology to protect Great Artesian Basin springs and groundwater-dependent ecosystems
- W3** Understanding and managing surface water systems including the Lake Eyre Basin



SUSTAINABLE LAND MANAGEMENT

Land management practices protect soil, vegetation and biodiversity

- L1** Effective pest plant and animal control protecting production systems
- L2** Addressing the threat of excessive total grazing pressure
- L3** Building land managers' capacity in adaptive agriculture, best practice land management and rehabilitation



PROTECTING AND ENHANCING BIODIVERSITY

Intrinsic biodiversity values are protected and enhanced

- B1** Managing key threats to protect natural values
- B2** Taking action for threatened species and ecosystem recovery
- B3** Maintaining and improving the condition of Great Artesian Basin springs and water-dependent ecosystems















PEOPLE AND PARTNERSHIPS

People and community are central to looking after our landscapes.

- P1** First Nations partnerships supporting cross-cultural knowledge sharing and landscape management outcomes
- P2** Supporting Landscape Groups to lead community action and education
- P3** Raising awareness of the region's natural values and connecting people to nature
- P4** Supporting community action to achieve land, water and coastal management outcomes




Kingoonya District priorities for landscape management



Priorities*	Landscape impacts	District Ranking [^]	Alignment to Regional Priorities**
Supporting innovation and diversification of land use in a changing climate	Climate change predictions for the district are for higher temperatures, declining rainfall and more extreme weather events. Support opportunities to adapt to a highly variable climate, diversify livelihoods and offset carbon emissions.	High	
Over-abundant kangaroos/ excessive total grazing pressure	Land degradation, habitat & species loss, agricultural productivity loss where over-grazing occurs	High	
Feral cats	Predation of native fauna by cats leads to biodiversity declines.	High	
Managing visitor impacts, access & mining	Weed spread, erosion, biosecurity issues, mental health impacts of people on the land (road safety impacts) Unauthorised visitors can cause damage to vegetation, tracks or other infrastructure, and upset stock.	Medium	
Excessive water extraction	Draw down leading to vegetation die off, land degradation, habitat & species loss	Medium	
Unsustainable livestock grazing practices	Land degradation, habitat & species loss, agricultural productivity loss	Medium	
Supporting community action and education	Build community capacity and community-led action through training, events, and grants.	Medium	
Change in flow regimes	Land degradation, habitat & species loss	Medium	
Buffel grass control	Forms dense monocultures. Out-competes native species. Also considered potentially useful pasture species by some landholders.	Medium	
Other weeds and emerging biosecurity issues (pests and disease) e.g. flies and mosquitoes	Outcompete native species. May reduce pasture productivity or have adverse impacts on production. (e.g. fleece quality) depending on species. Spread of disease to stock, native animals and humans.	Low	
Other native pests e.g. corellas	Destruction of habitat and shade trees in communities, mine sites & homesteads, large numbers competing with other species. Tourism impact, heating/cooling effects.	Low	
Foxes	Predation of native fauna by foxes leads to biodiversity declines. Can also affect production due to attacks on lambs.	Low	

[^]Priority ranking considers the **magnitude** of the threat or opportunity (how **severe/influential** and how **widespread/relevant**) it is, as well as the **reversibility** of its impacts.

** Some district priorities may not be regional priorities for the Board.

Kingoonya - Current programs and opportunities

District priority	District Ranking	Current programs and opportunities	Status	Who	Regional Focus Area
 Climate Resilient Region					
Supporting innovation and diversification of land use in a changing climate	High	<i>Building Pastoral Sustainability project</i>	Current /2018-2023	SAAL LB	C2
		<i>Weather station network (on-going)</i>	Current /on-going	SAAL LB	C2
		<i>Carbon farming opportunities</i>	Potential		C2
		<i>Solar farming</i>	Potential		C3
		<i>Biodiversity/ ecosystem service markets</i>	Potential		C2,C3
		<i>Sandalwood growing</i>	Potential		C2,C3
		<i>Tourism</i>	Potential		C2,C3
 Water Management					
Excessive water extraction	Medium	<i>Far North Prescribed Wells Area Water Allocation Plan</i>	Current /on-going	SAAL LB	W1
Change in flow regimes		<i>Application of Water Affecting Activities Control Policy (on-going)</i>	Current /on-going	SAAL LB	W3
 Sustainable Land Management					
Over-abundant kangaroos/ excessive total grazing pressure	High	<i>Kangaroo Management Partnership</i> <i>Kangaroo management survey</i>	Current /2021-2023	SAAL LB Bush Heritage & RMIT	L2
Unsustainable livestock grazing practices	Medium	<i>Building Pastoral Sustainability project</i>	Current /2018-2023	SAAL LB	L3,C2
Managing visitor impacts, access & mining	Medium	<i>Road and track restoration (targeted projects)</i>	Current / on-going	APOMA, Kokatha AC, Andamooka	B1, P3

District priority	District Ranking	Current programs and opportunities	Status	Who	Regional Focus Area
				Opal Fields Tourism Assoc.	
Other weeds and emerging biosecurity issues (pests and disease) e.g. flies and mosquitoes	Low	<i>Cochineal biological cactus control program</i>	Current / on-going	SAAL LB	L1
		<i>Landholder education on cactus control</i>	Current / on-going	SAAL LB	L3
Wild dog control	N/A	<i>Biteback wild dog control program</i>	Current /on-going	SAAL LB/ PIRSA	L1
		<i>Dog fence rebuild</i>	Current /2021 -2024	PIRSA	L1
 Protecting and enhancing biodiversity					
		<i>Private conservation - Native habitat and fauna recovery programs</i>	Current / on-going	Arid Recovery, Bush Heritage	B2
Feral cats	Medium	<i>Landholder education on cat control options</i>	Current / on-going	Roxby Council	B1,P4
Buffel grass control	Medium	<i>Roadside weed control</i>	Current / on-going	SAAL LB Bush Heritage	B1
Other native pests e.g. corellas	Low	<i>Design control trial using revegetation under large trees</i>	Current / on-going	Roxby Council	L1?
Foxes	Low	<i>1080 baiting on Parks and bait injection services, aerial baiting</i>	Current / on-going	SAAL, DEW, Arid Recovery Landholders	B1
 People and partnerships					
Supporting community action and education	Medium	<i>Grassroots Grants for local projects</i>	Current /on-going (annual)	SAAL LB	P4
		<i>Educational workshops on native fauna rescue/ handling</i>	Potential	Fauna Rescue Roxby Council	P3

Kingoonya Landscape Group Actions

District priority	Opportunity	Action	When	Collaborate	Status
Climate Resilient Region					
Supporting innovation and diversification of land use in a changing climate	<i>Carbon farming opportunities</i>	<ol style="list-style-type: none"> 1. Host workshop for landholders on carbon/ diversification options and emissions reductions methods 2. Attendance at community events with BHA & Arid Recovery canvas community 	TBA 2023	SAAL LB	Ongoing
Sustainable Land Management					
Over-abundant kangaroos/ excessive total grazing pressure	<i>Kangaroo Management Partnership</i>	<ol style="list-style-type: none"> 1. Update from partnership coordinator 2. Support/promote kangaroo management activities/trials 3. Share kangaroo management survey results and trial outcomes 	February 2022	SAAL LB Bush Heritage Landholders	Complete
Unsustainable livestock grazing practices	<i>Sustainable agriculture grazing workshop</i>	<ol style="list-style-type: none"> 1. Deliver grazing workshop in or near KI district 	TBA 2023	SAAL LB Landholders	Not started
Managing visitor impacts, access & illegal mining	<i>Road and track restoration (targeted projects; e.g. Borefield Track.</i>	<ol style="list-style-type: none"> 1. Voice concerns/ideas in any community consultation or meetings to guide future works in terms of cultural sites, environmental aspects 2. Promote/share FROSAT initiatives 3. Encourage/support Grassroot Grant participation 	March/April 2022	SAAL LB	Ongoing
Other weeds and emerging biosecurity issues (pests and disease) e.g. flies and mosquitoes	<i>Landholder education on cactus control</i>	<ol style="list-style-type: none"> 1. Workshop on use of chemical injector for woody weeds, corkscrew for cactus 2. Record locations, release cochineal, monitor progress, distribute cactus control factsheet 	TBA 2023 Anytime	SAAL Biosecurity Officer Relevant landholders, Arid Lands Bot Garden Avisure Roxby Council	Ongoing

District priority	Opportunity	Action	When	Collaborate	Status
		4. Flora/Fauna workshop support 5. Reviewing & contributing to district weed strategies			
Other weeds and emerging biosecurity issues (pests and disease) e.g. flies and mosquitoes		Promotion/ awareness raising	Anytime	Avisure, PIRSA Roxby Council	Ongoing
Protecting and enhancing biodiversity					
Feral cats	Landholder education on cat control options	1. Host seminar/ information session on feral cats and control options for landholders and community	TBA 2023	Thylation SAAL Roxby Council	Ongoing
Buffel grass control	Sharing examples from successful buffel grass control projects	1. Promotion/ awareness raising 2. Flora/Fauna ID workshop 3. Reporting weeds	TBA 2023	Roxby Council Arid Recovery SAAL LB Bush Heritage	Ongoing
Foxes	Helping to establish effective control of foxes	1. Promotion/ awareness raising 2. Flora/Fauna ID workshop 3. Targeted workshops	TBA 2023	Roxby Council SAAL LB Arid Recovery Bush Heritage Landholders	Ongoing
Other native pests e.g. corellas	Helping to establish effective control of corellas	1. Share trial results		Roxby Council SAAL LB Landholders	Complete
People and partnerships					
Supporting community action and education	Education on fauna rescue/ handling	1. Run information session in KI district (i.e. on managing injured wildlife)	TBA 2023	Roxby Council Arid Recovery Fauna Rescue SA	
	Education on flora/fauna identification and control of pest/weeds	1. Host workshop for community	May 2022	Arid Recovery BHP SAAL LB	Completed
Inappropriate visitor access	Educational campaign to raise visitors' awareness of appropriate practices	1. Identify key issues and locations in the district	Anytime	SAAL LB FROSAT SATC	Ongoing

District priority	Opportunity	Action	When	Collaborate	Status
		<p>2. Support roll out of educational campaigns – (e.g. Outback travel code)</p> <p>3. Promote district's features and appropriate travel practices at (e.g.) tourism events/ caravan shows</p>		OCA	
Water Management					
Excessive water extraction	<i>Education on natural resource management</i>	<i>Support/promote water saving activities</i>	Anytime	SAAL LB	Not started
Changes in flow regimes	<i>Education on natural resource management</i>	<i>Support/promote appropriate water affecting activities and improvements (e.g. grader/soil conservation workshops)</i>	TBA 2023	SAAL LB	Not started

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SA Arid Lands Landscape Board



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