

# Gawler Ranges District Plan

2024 – 2026



April 2024

## Introduction

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

The Gawler Ranges is one of seven districts in the SA Arid Lands region, and is located in the central south-west of South Australia. It covers an area of over 5 million hectares, to the west of Port Augusta, and south of Woomera.

The district is characterised by calcrete plains, gypsum dune-fields and weathered rocky ranges that drain into terminal salt lakes. The primary land uses of the district are pastoralism (predominantly sheep), mining and energy, military, tourism, conservation (public and private lands), recreation and a township (Iron Knob). It is an ancient landscape, with significant cultural values.

**Linked bioregions:** A bioregion is an ecologically and geographically defined area with common characteristics such as geology, landform patterns, climate, ecological features and plant and animal communities. The Gawler Ranges district is primarily comprised of the **Gawler bioregion**, with small parts of the Stony Plains and Great Victoria Desert bioregions also present.

**Size:** 50,017 km<sup>2</sup> (10% of SAAL Region)

**Towns (population):** Iron Knob – 110 (2021 census) reduction from 144 (2016 census)

**Aboriginal Nations:** Kokatha, Barngarla, (south-eastern), Wirangu

**Land use:** Pastoralism (predominantly sheep), mining and energy, military, tourism, conservation (public and private lands), recreation, service centres and a town.

**Catchment and key waterways:** Part Lake Torrens catchment. Minor drainage into Lake Gairdner and other salt lakes and towards Spencer Gulf. Very few waterways.

**National Parks and Reserves:** Parts of Gawler Ranges National Park – Gawler Ranges National Park Advisory Committee; part of Lake Gairdner National Park – Lake Gairdner National Park Co-management Board; part of Lake Torrens National Park, Lake Gilles Conservation Park, Pinkawillinie Conservation Park and Pureba Conservation Park.

**Key stakeholders:**

- National Parks and Reserves - Lake Gairdner National Park Co-management Board, Gawler Ranges National Park Advisory Committee, Friends of the Gawler Ranges National Park
- Landholders
- Nature Foundation SA – Hiltaba Conservation Property
- Secret Rocks
- Gawler Ranges Aboriginal Corporation; Kokatha, Wirangu and Barngarla Traditional owner groups
- Mining Companies – GFG Alliance, OZ Minerals and Peak Iron Mines
- Defence – Katunga
- Progress Associations (Gawler Ranges and Iron Knob)
- Iron Knob community
- Tourism ventures



**Figure 1:** Map of the SAAL region and Gawler Ranges 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 Gawler Ranges 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



# VISION

Leading the way to biodiverse and productive landscapes in a changing climate

## SA Arid Lands regional priorities

### Priorities

### Focus areas



#### 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

## Gawler Ranges District priorities for landscape management

Priorities <sup>1</sup>	Landscape impacts	District Ranking <sup>2</sup>	Alignment to Regional Priorities**
<b>Weeds – other<sup>3</sup></b> (Buffel grass; Cactus Species; Fountain Grass; Innocent Weed; Mesquite; Parkinsonia; Pepper Tree; African Rue; Athel Pine)	<p>Buffel grass forms dense monocultures. Out-competes native species. Considered as a potentially useful pasture species by some landholders</p> <p>Displaces native vegetation with flow-on effects for native fauna</p> <p>Impacts also for stock management/pastoral production</p> <p>Production impacts include toxicity to stock, prickly contamination of fleece, thickets that impede stock mustering and access to water, harbour for rabbits</p>	High	 
<b>Managing total grazing pressure</b>	Excessive grazing pressure leads to landscape degradation and disruption of landscape systems and processes; changes in vegetation composition, impacts on regeneration and recruitment; loss of vegetation cover, soil erosion. Impacts sustainable pastoralism and biodiversity, as well as condition of landscape features such as rock-holes. Overabundant kangaroos can lead to animal welfare impacts.	High	
<b>Soil health – Understanding and supporting water and nutrient cycles</b>	Improving carbon stocks and soil biological activity improves soil water drought resilience and pasture recovery after drought, benefitting production, biodiversity and climate mitigation	High	
<b>Adapting to a changing climate</b>	<p>Helps landholders manage financial risk associated with extended drought conditions and/or market changes, and provides opportunities to rest pasture and promote biodiversity values</p> <p>Interpreting climate data at district scale for property management</p> <p>Support opportunities to adapt to the proposed changing climatic conditions</p> <p>Potential depletion of underground aquifers. Potential impacts on pastoral industry and ground water dependent ecosystems</p>	High	 
<b>Feral animals</b> <b>Foxes</b>	Loss of native fauna; impact on livestock, particularly lamb mortality	Medium	
<b>Cats</b>	Predation of native fauna by cats leads to biodiversity declines		
<b>Wild dogs</b>	Serious issue for property management, potentially serious impacts on native fauna. Potential safety issues for public		






<b>Nature and cultural knowledge and awareness</b>	Improved knowledge and awareness of local culture and environment, particularly for young people in the community	Medium	
<b>Education, capacity building and community engagement in landscape management</b>	Assist and support community capacity and community led action through training, events and grants	Low	

<sup>1</sup> Priorities include both threats and opportunities ranking.



<sup>2</sup> Priority ranking for the district 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.

<sup>3</sup> To be reviewed with district weed strategy

## Gawler Ranges - Current programs and opportunities

District priority	District Ranking	Current programs and opportunities	Status	Who	Regional Focus Area
 <b>Climate Resilient Region</b>					
Adapting to a changing climate - Diversification of income streams	High	<i>Carbon Farming workshops</i>	Potential	SAAL LB, PIRSA	C2, C3
Adapting to a changing climate - Interpreting climate data at district scale for property management planning	High	<i>Supporting landholders in the use of My Climate View – webinar or in person</i>	Potential	SAAL LB, BOM	C2
 <b>Water Management</b>					
Striking a balance between landscape hydration and capture for livestock	High	<i>Water Infrastructure Rebate</i> for landholders	Current	PIRSA	W1
		Exploring technologies to find potable ground water for livestock and how to manage it when found	Potential	Landholders, SAAL LB, GFG Alliance, LB grants	W1
		Potential grader workshop and other opportunities	Potential	SAAL LB	W1
 <b>Sustainable Land Management</b>					
Land degradation – excessive total grazing pressure, especially from goats and new livestock breeds	High	Regenerative Agriculture Workshops	Current/Ongoing	SAAL LB	L3, L4
		On-ground projects to address land degradation, revisit old EMU, BPS and landscape legacy projects	Potential	SAAL LB, GR LG	L3, P4
Soil health – understanding and supporting landscape rehydration and nutrient cycles	High	Demonstration sites: on-farm examples of correctional practices for soil/land degradation for ‘sticky beak’ days	Potential	SAAL LB	L3
Weeds – agricultural weeds	High	Weed control and education	Current/Ongoing	SAAL LB, PIRSA, Landholders	L1



District priority	District Ranking	Current programs and opportunities	Status	Who	Regional Focus Area
Over-abundant kangaroos/excessive total grazing pressure	High	<i>Kangaroo Management Partnership</i> <i>Kangaroo Management survey</i>	<b>Current/Ongoing</b> 2024-2026 <i>Reapplied for and were successful LPF</i>	SAAL LB	L2
Wild dogs	Medium	<i>Biteback</i> wild dog control program	<b>Current/Ongoing</b>	SAAL LB, PIRSA, Landholders	L1
 <b>Protecting and enhancing biodiversity</b>					
Feral predators – foxes	Medium	Threatened species recovery, landscape-scale pest control, Wild Dog Bait Injection services	<b>Current</b> – Use Wild dog bait services	SAAL LB	B1
Feral predators – cats	Medium	Cat control program (around Iron Knob)	<b>Potential</b>	SAAL LB, OCA	B1
Goats	High	Development of rangeland goat management policy – state goat coordinator	<b>Current/2024-26</b>	Pastoral Board, SAAL LB, other LBs and partners	B1, L2
Weeds – Buffel Grass	High	DIT assist with control along roadways, SAAL funding	<b>Current</b>	SAAL LB, PIRSA, other LBs	B1
Weeds – other environmental weeds, refer to <i>District Weed Information Guide</i>	High	Weed control – Athel Pine, Pepper Tree, Cactus and Boxthorn (Grassroots Grants program) Biocontrol - Use of cochineal on cactus	<b>Current/Ongoing</b>	SAAL LB	L1, B1, P4
 <b>People and partnerships</b>					
Nature and Cultural Knowledge and Awareness	Medium	Education program; School of the Air and <i>Kids on Country</i>	<b>Current/Ongoing</b>	SAAL LB, Nature Foundation SA, School of the Air	P1, P3
Education, capacity building and community engagement in landscape management	Low	Landscape Group meetings and local projects	<b>Current/Ongoing</b>	SAAL LB, GR LG	P4
		Grassroots Grants for local projects	<b>Current/Ongoing</b> (offered annually)	SAAL LB	P4
		Deliver and promote educational workshops and events in the Gawler Ranges	<b>Potential</b>	GR LG, FRRR	P2, P4

District priority	District Ranking	Current programs and opportunities	Status	Who	Regional Focus Area
		Explore opportunities for accreditation in key training areas	Potential	SAAL LB, PIRSA, RDA, OCA	P2
		Improve access to information and connect community to knowledge and capacity building opportunities Attract/encourage research projects and trials to the region; Develop social licence partnership with private industry (e.g. net zero carbon initiatives) Industry networking events – field days, to tap into research and industry knowledge	Potential	SAAL LB	C2, C3, L3

**SAAL LB** SA Arid Lands Landscape Board, **PIRSA** Department of Primary Industries and Regions, **RDA** Regional Development Australia, **OCA** Outback Communities Authority, **GR LG** Gawler Ranges Landscape Group, **GFG Alliance** Gupta Family Group Alliance, **BOM** Bureau of Meteorology, **LB** Landscape Board, **FRRR** Foundation of Rural Regional Renewal, **LPF** Landscape Priorities Fund

## Gawler Ranges Landscape Group Actions

District priority	Opportunity	Action/s (for Group)	When	Collaborate	Status
<b>Climate Resilient Region</b>					
Diversification of income	Connect community to knowledge and capacity building opportunities	1. Hold carbon/soil workshop in GR district  2. Host industry networking event/field day – Race Course Pastoral Field Day  3. Connect community/peers to relevant Board staff for technical advice (RALF, Pest Plant and animal control, ecology team etc.)  4. Connect community to Drought Hub a) Hub representative to attend group meeting	1. Hold a workshop  2. March 2025	1. SAAL LB  3. Other Landscape Boards, SAAL LB, PIRSA  4. UoA, SAAL LB	1. Ongoing  3. Ongoing  4. Fiona Tomney to attend
Responding to a variable and changing climate	Collate climate information at district scale for property management planning	1. Identify what climate information is needed by landholders and what format would be most useful for their property planning	1. Share findings with GR LG and community as information arises	SAAL LB, BOM	1. Ongoing
<b>Water Management</b>					
Access to water supply/Lack of information about aquifers	Share new technologies with the GR community on how to; locate groundwater and best manage it when it has been found	1. Engage with mining companies on the technologies they use to find groundwater and share these findings with the GR community		GFG Alliance, SAAL LB	1. Engage with mining companies about the technology they use

District priority	Opportunity	Action/s (for Group)	When	Collaborate	Status
Striking a balance between landscape rehydration and capture for livestock	Connect community to knowledge and capacity building opportunities	1. Host workshop in GR district 2. Find and share any relevant information/webinars with GR residents		SAAL LB	1. Ongoing 2. Ongoing
<b>Sustainable Land Management</b>					
Land degradation – excessive total grazing pressure	Share findings from peoples PMP (Property Management Planning) journey	1. Identify potential demonstration sites: on-farm examples of correctional practices for soil/land degradation for 'sticky beak' days	1. Ongoing	SAAL LB, PMP participants	1. Ongoing
Raising awareness about the importance of soil health and the positive effect it has on vegetation	Deliver educational workshops and events on soil health in the Gawler Ranges	1. Share findings of soil related Grassroots Grants or landscape legacy projects (sticky beak day or landscape legacy fact sheets) with the GR community 2. Promote soil health webinars to GR community/Arid Lands residents 3. Soil specific workshop/s	1. Ongoing	1.SAAL LB  2.SAAL LB 3.SAAL LB	1.Ongoing  2.Ongoing 3. Ongoing
<b>Protecting and enhancing biodiversity</b>					
Goats	Share current information	share any relevant information/webinars with GR residents	Ongoing	SAAL LB, Pastoral Board	Provide information about new role
Cats	Share current information	share any relevant information/webinars with GR residents	Ongoing	OCA, SAAL LB	Update about IK cat management
Foxes	Share current information	share any relevant information/webinars with GR residents	Ongoing	SAAL LB	Ongoing



District priority	Opportunity	Action/s (for Group)	When	Collaborate	Status
Understanding and preservation of cultural values	Produce educational resources and host educational workshops for youth, landholders and broader community	1.Kids on Country - expand involvement, working on expanding program offered	3 x camps at Hiltaba in 2024	Nature Foundation SA, SAAL LB, National Parks	1.Ongoing

### Achievements

Port Augusta Pastoral Field Day - December 2021

Property Management Planning participation by GR residents 2021 - 2024

Buckleboo Workshop – May 2022/2023

Iron Knob Neville Bonney Workshop - May 2022

Secret Rocks Sticky Beak Day – October 2022

Iron Knob John Zwar Workshop - March 2023

DunnART theatrical roadshow - May 2023

Nonning Carbon/Diversification Workshop - June 2023

Iron Knob Worm/Compost/Biochar Workshop - September 2023

Corunna Grader Workshop - September 2023

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SA Arid Lands Landscape Board