



Murraylands and Riverland Landscape Board 2021-2026 Regional Landscape Plan

Working in partnership with regional communities to deliver a healthy and resilient landscape



Government of South Australia

Murraylands and Riverland
Landscape Board

Foreword



On behalf of the Murraylands and Riverland Landscape Board (the Board), I am pleased to present our inaugural Regional Landscape Plan. This plan builds on the deep experience of the Murraylands and Riverland region's people and communities, to provide direction for the practical management of our amazing array of landscapes and the land uses within them.

The landscapes of the Murraylands and Riverland region are incredibly important to its people and South Australia. They produce premium wine, food and fibre for the domestic and international markets to make a significant contribution to the State economy. The region's landscapes also make it one of SA's top tourist destinations, with features of national and international renown, such as the River Murray, its supporting wetlands, internationally recognised conservation sites, extensive native vegetation (on both public and private land) and a wide diversity of native flora and fauna.

The health and sustainability of these landscapes and the services they provide can only be conserved and enhanced with strong, careful and sustainable management of the natural resources. This applies particularly to water, land, biodiversity and control of pest plants and animals.

The Board wants to reinvigorate the enthusiasm for collaboration and stewardship in the management of these landscapes and their natural resources. The people in the Murraylands and Riverland region are well known for their resilience and capacity to innovate. As a Board, we know that the success of this plan will only be achieved through partnerships – with the involvement, commitment and collaboration of landholders, First Nations, industry, government and the wider community.

The Board looks forward to discussing your ideas and partnering with you.

Dianne Davidson AM

Presiding Member
Murraylands and Riverland Landscape Board

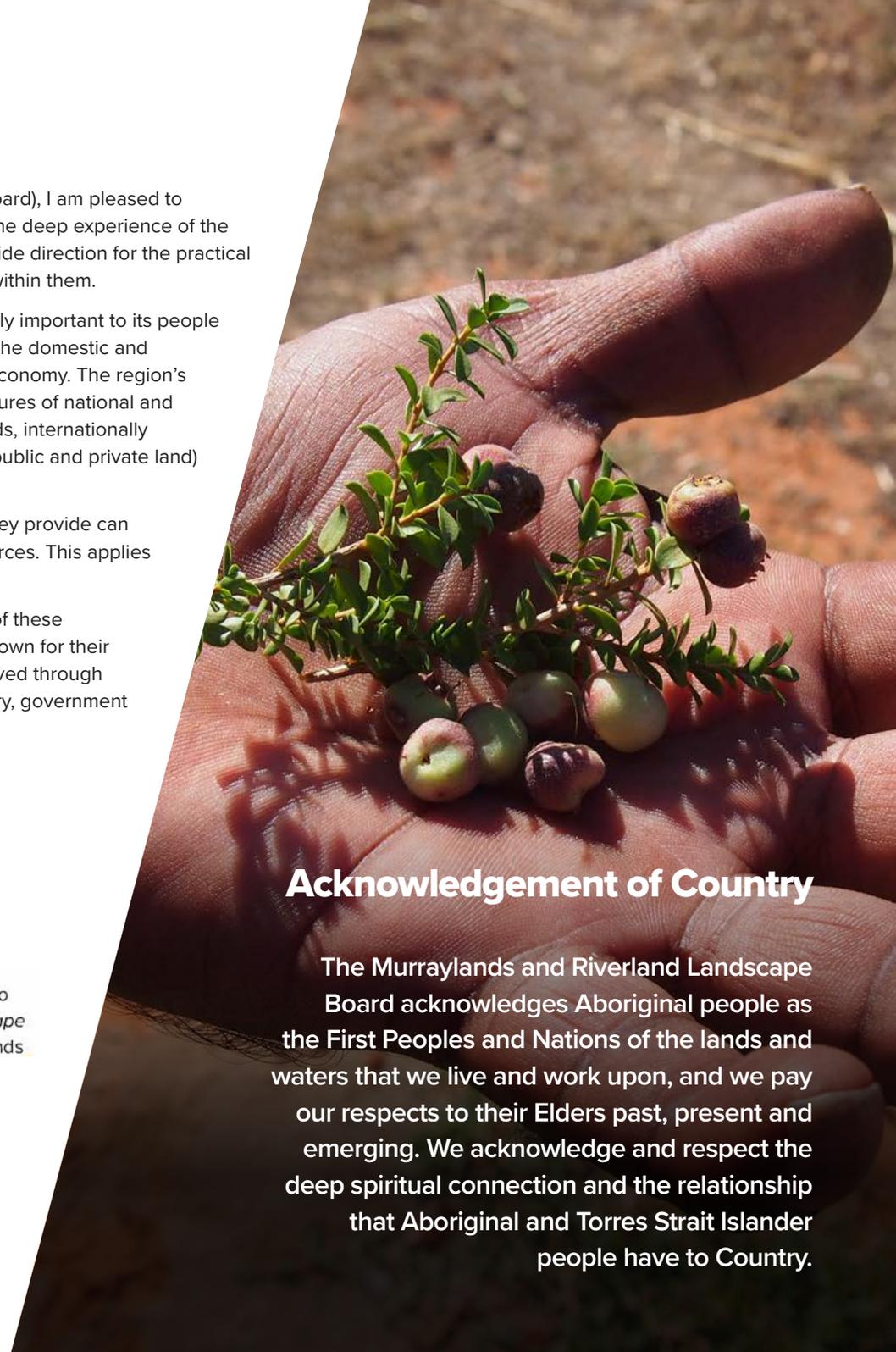


I, Honourable David Speirs, Minister for Environment and Water, after taking into account and in accordance with the requirements of Section 50 of the *Landscape South Australia Act 2019*, hereby approve the landscape plan for the Murraylands and Riverland Region for 2021-2026.

Hon David Speirs MP
MINISTER FOR ENVIRONMENT AND WATER

Acknowledgement of Country

The Murraylands and Riverland Landscape Board acknowledges Aboriginal people as the First Peoples and Nations of the lands and waters that we live and work upon, and we pay our respects to their Elders past, present and emerging. We acknowledge and respect the deep spiritual connection and the relationship that Aboriginal and Torres Strait Islander people have to Country.



Our priorities and focus areas

Working in partnership with regional communities to deliver a healthy and resilient landscape



SUSTAINABLE AGRICULTURAL AND PASTORAL LANDSCAPES

- Work with industry and farming groups to identify and address soil management issues to improve soil health and build resilience
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity
- Promote and support the protection and enhancement of on-farm biodiversity and native vegetation as part of a productive system
- Promote and demonstrate best management practices to retain ground-cover and reduce erosion risk
- Support land managers to build resilience in farming systems through monitoring and managing climate risks and extreme events



SUSTAINABLE WATER USE

- Work with the irrigation industry to optimise water use for productive, environmental and cultural outcomes
- Ensure sustainable water use by all water users in a changing climate
- Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes
- Support water users to build resilience through monitoring and managing climate risks and extreme events
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity



HEALTHY RIVERS, LAKES AND WETLANDS

- Manage and deliver environmental water to build the resilience of targeted wetland and floodplain ecosystems
- Actively manage watercourses for improved ecological outcomes in a changing climate
- Deliver initiatives that improve conditions for threatened species and culturally significant species
- Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species



HEALTHY NATURAL LANDSCAPES

- Work in partnership to manage total grazing pressure, including from over-abundant native species
- Work in partnership to proactively manage fire in the landscape to improve or maintain condition of key ecological and cultural assets
- Encourage targeted revegetation and restoration
- Ensure future seed availability of native species for revegetation in a changing climate
- Improve the level of protection for threatened and culturally significant species and ecological communities
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species



PEOPLE AT THE HEART OF LANDSCAPE MANAGEMENT

- Build and maintain strategic partnerships with, and between, stakeholders for mutually beneficial outcomes
- Work in partnership with First Nations to manage the region's landscapes, protect and restore cultural values and assets, and build capacity
- Partner with young people, foster their understanding, participation and leadership
- Strengthen capacity through increased knowledge, skills and participation
- Support community-led landscape management, providing resources to support community projects and practical action
- Recognise and encourage volunteers and volunteer community groups and support them to work safely and effectively



Sustainable agricultural and pastoral landscapes

Soil health is the ability of the soil to function as a living ecosystem in relation to its natural capacity. A healthy soil sustains biological productivity, maintains environmental quality and promotes plant, animal and human health. Healthy soils are vital for productive, sustainable and profitable farming systems and are fundamental to cultural wellbeing and the environment.

In the Murraylands and Riverland region, the soil constraints and management issues that impact our soils include wind erosion, soil salinity and saline seeps, soil acidity, compaction, non-wetting (sands), shallow soils, and low fertility. Each of these issues can limit the productive potential of crops and pastures.

Pest plants and animals also present a major risk to the productive and sustainable use of the region's landscapes. They compete, contaminate and spread disease within crops, pasture and livestock and degrade the natural environment.

Over the past 30 years the region has seen a significant increase in the adoption of improved land management practices for both pest and soil management. Overall, the regional soil health is improving, however as farming systems evolve issues emerge which require investigation and specific solutions.

The Murraylands and Riverland Landscape Board works with farmers, traditional owners and farming groups to address soil constraints, management issues, support on-farm biodiversity and reduce the impacts of pests, with solutions that can be integrated into local farming systems, helping them remain productive, sustainable and profitable.

Focus areas

- Work with industry and farming groups to identify and address soil management issues to improve soil health and build resilience
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity
- Promote and support the protection and enhancement of on-farm biodiversity and native vegetation as part of a productive system
- Promote and demonstrate best management practices to retain ground-cover and reduce erosion risk
- Support land managers to build resilience in farming systems through monitoring and managing climate risks and extreme events

Measures of success

- Increased uptake of improved land management practices to reduce risks to soil health
- Coordinated control efforts to reduce prioritised pest plant and animal populations across the landscape
- Proactive surveillance for, and timely control of, alert pest species undertaken by ourselves and others
- Increased uptake of improved land management practices to re-establish, enhance or protect native vegetation within productive systems
- Increased uptake of improved land management practices to increase groundcover
- Land managers are accessing information and tools to help with decision-making and feel supported in managing through increasing pressures or adverse events





Sustainable water use

Water is essential to all living things and is vital for a healthy environment. The quality and availability of water often determines our quality of life. Managing the region's water resources is necessary to ensure that everyone's needs are met, including the environment.

The Murraylands and Riverland regional economy depends on sustainable water use to support the needs of a flourishing agricultural sector as well as industrial and domestic requirements.

Water is also important to First Nations in the region. First Nations' culture and wellbeing is intrinsically linked to water. First Nations communities, as water users, are involved in water planning and management across the region to ensure that their cultural and productive aspirations are included.

The Murraylands and Riverland Landscape Board plays a leading role in supporting sustainable water use by developing water allocation plans for prescribed water resources and policies to guide water affecting activity within the region. It facilitates discussion with stakeholders to support a balanced approach to water use and is committed to assisting the community to understand water sharing arrangements and limitations. The Murraylands and Riverland Landscape Board will continue to partner with the irrigation industry and the Australian Government to implement programs that optimise water use for productive, environmental and cultural outcomes.

Focus areas

- ▶ Work with the irrigation industry to optimise water use for productive, environmental and cultural outcomes
- ▶ Ensure sustainable water use by all water users in a changing climate
- ▶ Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes
- ▶ Support water users to build resilience through monitoring and managing climate risks and extreme events
- ▶ Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity

Measures of success

- Partnerships are established and technical support provided to improve efficiency and productivity of water use on farm
- Key water management policies are developed and reviewed and community are involved
- The community is increasingly informed and has a good understanding of water within the region, arrangements for sharing water and its use across the variety of purposes
- Water users are accessing information and tools to help with decision-making and feel supported in managing through increasing pressures or adverse events
- Coordinated control efforts to reduce prioritised pest plant and animal populations across the landscape
- Proactive surveillance for, and timely control of, alert pest species undertaken by ourselves and others



Image © Tahli Allen



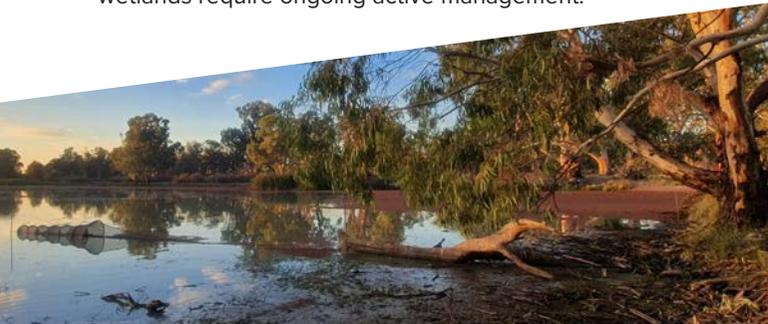


Healthy rivers, lakes and wetlands

Rivers and wetlands are a critical part of our environment and provide an important range of environmental, social and economic services. The wetlands in our region reduce the impacts of floods, absorb pollutants, improve water quality and provide habitat for a wide diversity of life. Many plants and animals reliant on these wetlands are found nowhere else. These rivers and wetlands attract visitors to our region, both human and international feathered travellers, while also providing commercial benefits such as tourism and the local fishery industry.

There are 250 wetland complexes (sets of wetlands that are dependent upon each other) along the SA River Murray, including the large Riverland, and Coorong, Lake Alexandrina and Lake Albert Ramsar sites. Most of these wetlands are suffering from the impacts of river regulation, water extraction and pest species as well as the devastation caused by the Millennium drought.

The Murraylands and Riverland Landscape Board, through its wetlands program, is involved in managing more than 85 wetland complexes to improve their condition and make them more resilient and adaptable to a future characterised by a warmer climate and reduced water availability. There is also a strong focus on the conservation of many threatened fauna and flora species, and improving the condition of habitats that are essential for breeding and recruitment. In an entirely regulated river system like the Murray-Darling Basin these wetlands require ongoing active management.



Focus areas

- Manage and deliver environmental water to build the resilience of targeted wetland and floodplain ecosystems
- Actively manage watercourses for improved ecological outcomes in a changing climate
- Deliver initiatives that improve conditions for threatened species and culturally significant species
- Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes
- Encourage integrated management of prioritised pest plants and animals and early detection of alert species



Measures of success

- Active hydrological management program and targeted ecological monitoring and investigations undertaken
- Priority actions undertaken, applying improved knowledge to stabilise populations, build resilience, improve opportunities for recruitment and expand native species' range
- The community is increasingly informed and has a good understanding of water within the region, arrangements for sharing water and its use across the variety of purposes
- Proactive surveillance for, and timely control of, targeted pest species undertaken by ourselves and others





Healthy natural landscapes

The Murraylands and Riverland region has biologically diverse landscapes that are home to over 2,000 plant species and more than 450 animal species, as well as countless invertebrates, fungi and micro-organisms. Unfortunately many species have been lost from their former range and many are still declining.

The regional flora and fauna have had to withstand pressure from the time that the country was first opened up to European colonisation until now, including impacts from unsustainable grazing pressure, human habitation, changes to water availability, pests, and the effects of fire.

Many areas of relatively intact natural landscape within the region have been set aside for conservation in an effort to preserve what is left and maintain ecological function. Other parts of the region have been extensively cleared for agriculture, which has left remaining natural habitat fragmented and unable to support the variety of life it once did.

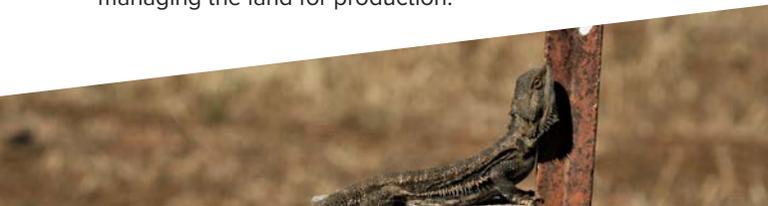
Fortunately many landholders and community members are passionate about conserving the native plants and animals and are willing to invest time and effort in improving the conditions for native species on their properties or other land. The Murraylands and Riverland Landscape Board will work with community to build on restoration activities undertaken with many years of state and federal funding, including improving response to bushfire as well as using fire as a restoration tool, undertaking measures to decrease the total grazing pressure across the landscape, and working with farmers to conserve our precious biodiversity while still managing the land for production.

Focus areas

- ▶ Work in partnership to manage total grazing pressure, including from over-abundant native species
- ▶ Work in partnership to proactively manage fire in the landscape to improve or maintain condition of key ecological and cultural assets
- ▶ Encourage targeted revegetation and restoration
- ▶ Ensure future seed availability of native species for revegetation in a changing climate
- ▶ Improve the level of protection for threatened and culturally significant species and ecological communities
- ▶ Encourage integrated management of prioritised pest plants and animals and early detection of alert species

Measures of success

- Coordinated approach to reduce impacts of grazing animals on public and private land
- Fire planning and response is informed by up to date ecological knowledge
- Appropriate restoration activities and targeted investigations undertaken through strengthened partnerships
- Increased volumes of seed for a diverse range of plant species stored for strategic revegetation
- Priority actions undertaken, applying improved knowledge to stabilise populations, build resilience and improve opportunities for recruitment and dispersal
- Priority actions undertaken in partnership, applying improved knowledge to increase function, build resilience and improve opportunities for regeneration
- Proactive surveillance for, and timely control of, targeted pest species undertaken by ourselves and others





People at the heart of landscape management

It is people who manage landscapes therefore the health and robustness of our communities is closely linked to the health and robustness of the region's landscapes and the natural resources within them. An understanding of the pressures people place on landscapes, as well as the pressures people face is essential for effective landscape management. The Murraylands and Riverland Landscape Board recognises that the people in our region are a source of knowledge, inspiration and ideas with different motivations for their interactions and commitment to the landscapes they live or work in.

The Murraylands and Riverland Landscape Board believe that people are at the heart of managing landscapes. The following suite of focus areas will continue the substantial work and successful outcomes achieved to date in establishing and strengthening partnerships, gaining and sharing knowledge, raising awareness, and training and education to equip people to work together towards long-term regional landscape outcomes.

Focus areas

- ▶ Build and maintain strategic partnerships with, and between, stakeholders for mutually beneficial outcomes
- ▶ Work in partnership with First Nations to manage the region's landscapes, protect and restore cultural values and assets, and build capacity
- ▶ Partner with young people, foster their understanding, participation and leadership
- ▶ Strengthen capacity through increased knowledge, skills and participation
- ▶ Support community-led landscape management, providing resources to support community projects and practical action
- ▶ Recognise and encourage volunteers and volunteer community groups and support them to work safely and effectively

Measures of success

- Effective relationships with strategic partners are established and maintained
- First Nations are actively involved in landscape management
- Young people are actively involved in learning about and managing our landscapes
- Community members have increased knowledge and skills
- Resources are provided for community to be actively involved in landscape management
- Volunteers are actively involved in landscape management



Image © Demi Taylor

Why we need to act

The region's landscapes are constantly changing due to natural causes and human related activity. The consequences of human activity and our management choices can be complicated and need careful consideration to reduce negative impacts. We are unlikely to be able to control all undesirable influences, but should work towards minimising their impacts. The condition of the region's natural environment and how it is changing over time is tracked through the 'State of the Environment' report cards found at <https://data.environment.sa.gov.au/Trend-and-condition-reports/Pages/default.aspx>

A range of influences on the region's landscapes will occur at different scales (in space and time). However, a resilient landscape is able to resist, tolerate and recover quickly from disturbance. We are working with the community to build healthy, natural and productive systems that are resilient and develop community capacity to adapt to change.



International, National & Statewide

- A changing climate - reduced rainfall, increasing temperatures, increasing time in drought, fire danger, reduced inflows to River Murray
- Global changes to market and commodity prices
- Industry restructures
- Carbon markets
- Food demand
- Legislation and policy change
- Declining investment
- Technology
- Politics

Regional

- Population changes
- Land use changes
- Growing tourism
- Regional investment and employment
- Food & fibre production

Subregional - *Impacting some parts of the region more than others*

- Increasing pressure on water resources
- Pest plant and animal impacts
- Soil acidity and salinity
- Pollution
- Rising sea levels
- Drought
- Bushfire and inappropriate fire regimes
- Loss and fragmentation of habitat
- Community remoteness
- Transport

How we will deliver this plan

Every land owner in the Murraylands and Riverland Landscape region pays a landscape or water levy which the board has the responsibility of investing wisely to achieve the priorities and focus areas within this plan.

An annual business plan outlines the implementation program that the board will invest in for the next 12 months, providing information on the proposed income and annual expenditure against programs to deliver the vision, priorities and focus areas as outlined in this plan.

Successful landscape management is dependent on the quality and effectiveness of the partnerships that exist between strategic stakeholder groups. Strong partnerships and working relationships built on a mutual understanding and shared values, trust, transparent decision making, sound communication and responsiveness will provide confidence, motivation and commitment towards achieving long-term regional landscape outcomes.

The Murraylands and Riverland Landscape Board recognises it has a leading role in brokering partnerships to help deliver this plan. While many strong partnerships already exist, there is an opportunity for others to be formed or improved with regional stakeholders.

Key partnerships

Local Government

We work closely with councils across the region to promote, support and enhance ecologically sustainable development and practical action for landscape management with and for the community.

First Nations

We work closely with First Nations across the region to build strong relationships, protect and restore cultural values and assets, and increase involvement in landscape management.

Australian Government

We maintain a productive, open, reliable and responsive working relationship with the Australian Government (providing contracted services, recognising and fostering mutual benefits derived from this partnership).

State Government and other landscape boards

We commit to working together in mutually beneficial ways, seeking to achieve common goals for effective management of landscapes, on behalf of the government and the people of South Australia.

Grassroots Groups (LAP and Landcare, volunteer groups, non-government organisations)

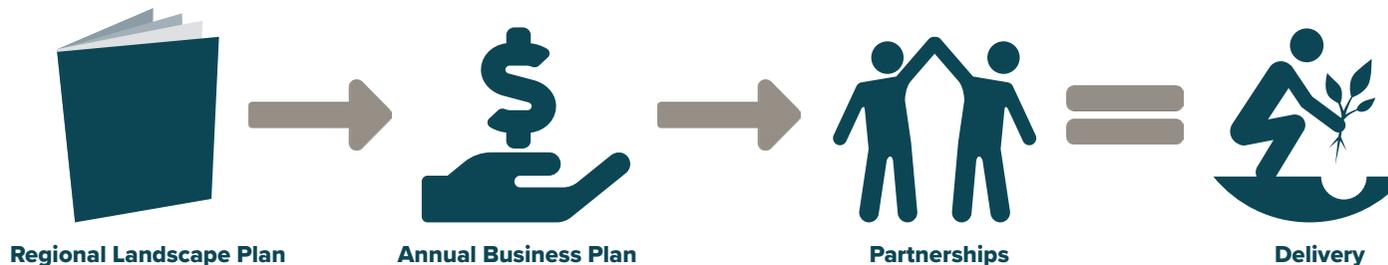
We listen and partner with the grassroots community and non-government organisations across the region to ensure support for 'community led' landscape management.

Young people

We commit to partnering with young people and supporting their active involvement of in a range of ways to contribute to improved landscape outcomes.

Primary production, industry and farming groups

We collaborate with individual primary producers and with farmer groups and industry bodies. We listen to what is important to land managers and endeavour to work together to solve problems and create innovative solutions to landscape management challenges.



The region

The Murraylands and Riverland region extends from where the River Murray crosses the border into South Australia, through the northern Mallee to the foot of the Eastern Mount Lofty Ranges; and from the Rangelands in the north to the southern Mallee and Lower Lakes in the south. It covers approximately 53,780 square kilometres.

The following local council areas are included within the Murraylands and Riverland region:

- Southern Mallee District Council
- Renmark Paringa Council
- Coorong District Council
- District Council of Loxton Waikerie
- The Rural City of Murray Bridge
- Berri Barmera Council
- District Council of Karoonda East Murray
- Mid Murray Council

There are also areas of unincorporated land around the Riverland and within the pastoral area.

Our work occurs on the lands and waters of a number of First Nations including Ngarrindjeri, the First Peoples of the River Murray and Mallee Region, Peramangk, Ngadjuri, and Wilyakali. First Nations maintain a strong connection to their lands and waters and are actively involved in managing the region's natural and cultural landscapes.

The region forms the south-western portion of the Murray-Darling catchment into which the River Murray flows and supports highly productive horticultural industries as well as significant tourism, recreation and manufacturing sectors. The region is one of the most productive agricultural areas in South Australia.

There are ecosystems of state, national and international significance, including the Ramsar-listed Chowilla Floodplain, the Coorong and Lower Lakes and Riverland complexes.

The region has a long history of volunteering in environmental management, with a wide range of active groups undertaking action to look after their local landscapes. Groups include Landcare and Local Action Planning Groups, land management groups, wetland groups, sustainable production groups and catchment groups.

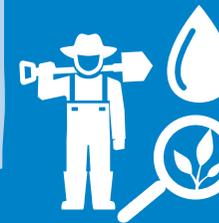


The region is **HOME** to about **70,000 PEOPLE** and over **6,100 BUSINESSES.**

TOURISM VISITORS to our region spend about **\$374M PER YEAR IN TOTAL**



More than **1,680 PEOPLE** involved in **69 VOLUNTEER GROUPS**



LAND USE of the region is made up of

- **30% CONSERVATION AND NATURAL ENVIRONMENTS**
- **65.5% AGRICULTURAL PRODUCTION**
- **4.5% OTHER** (including residential, manufacturing and industrial, mining, water bodies etc)



There are **46 CONSERVATION PARKS, NATIONAL PARKS AND RESERVES**



There are **3 RAMSAR-LISTED SITES** in our region



There are **892 HERITAGE AGREEMENTS** on private land

Board's role

We have a responsibility for managing the region's landscapes and will take an active role in being a conduit and connector to bring together the efforts of all levels of government, industry, key stakeholders, First Nations and communities.

We provide strategic leadership to strengthen community-led delivery for managing the natural resources at a whole of landscape scale.

We encourage the community to see themselves as stewards for our environment, to be responsible for the sustainable use and protection of the natural environment through conservation and best management practices.

The Murraylands and Riverland Landscape Board is a statutory body accountable to the Minister for Environment and Water. Funding for our programs and projects comes from many sources including community contributions through landscape and water levies. New funding opportunities are constantly being explored to increase investment in the region.

This regional landscape plan is based on community and stakeholder feedback we have received and will provide direction for our work for the next five years. Strengthening partnerships with the regional community, including First Nations, will be important for achieving the desired outcomes.

We strive to fulfil our vision for the region by delivering on ground action, providing advocacy, facilitation, education and funding for grassroots projects with our stakeholders.

Guiding principles

- We work to sustain a productive economy underpinned by a healthy environment.
- We ensure climate science is part of all planning and decisions.
- We respect, recognise and are informed by regional and traditional knowledge throughout our work.
- We innovate in the solutions we implement.
- We seek continuous improvement to provide the best possible support for our region.
- We communicate and celebrate the impact of our work with the regional community.
- We bring people together to achieve the priorities for our region.
- We work in partnership with First Nations across all aspects of our business.



Image © Cameron Dixon



How we will measure success

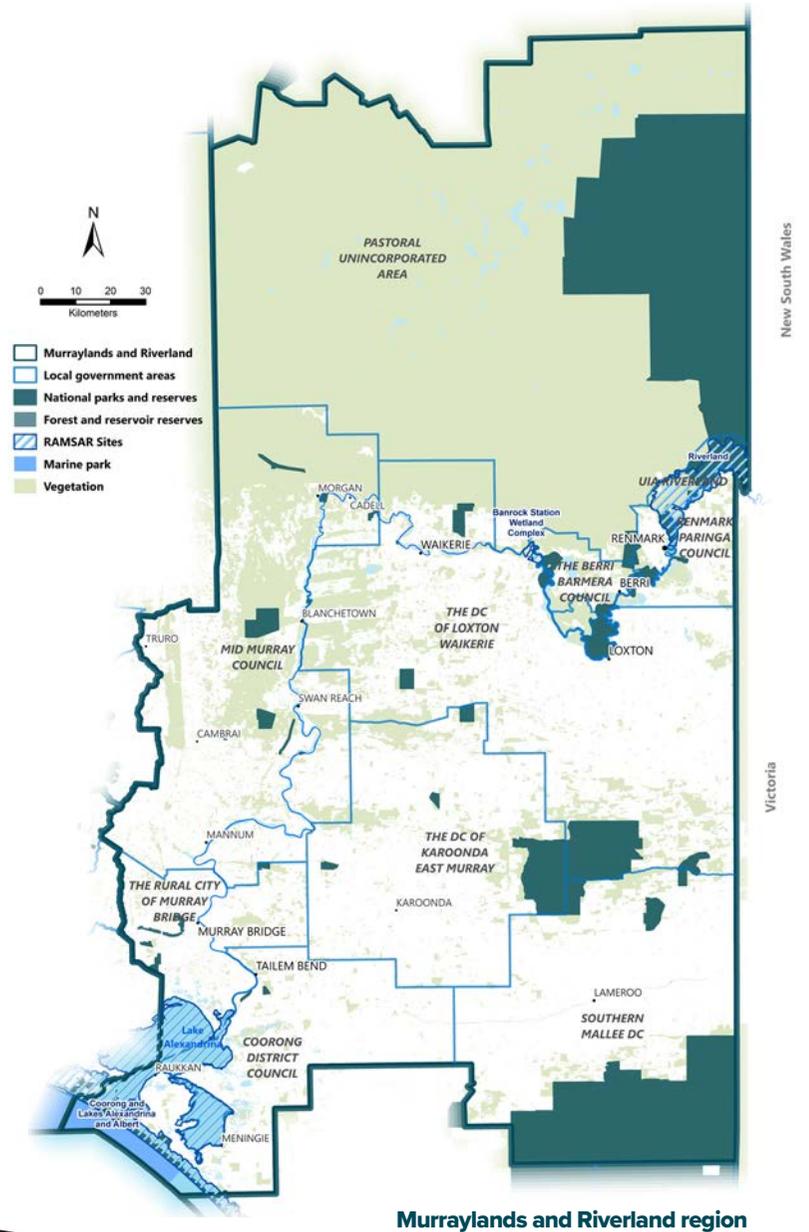
Progress will be measured and communicated in several ways:

- ▶ collating the outputs and achievements of each program area and reporting these, along with our good news stories, on an annual basis
- ▶ once within the five year life of the plan, evaluating how successful we have been in achieving the outcomes described against our regional priorities and focus areas. We will ask others to provide input to this process. The outcomes of this evaluation will help to inform subsequent versions of the regional landscape plan.

A detailed Landscape Evaluation Framework will be developed which will describe:

- ▶ the processes we will use to determine how successful we have been in achieving the outcomes
- ▶ the evidence we will draw upon to evaluate success
- ▶ when the evaluations will take place and how we intend to share the results
- ▶ how we intend to use the learning for improved program delivery and decision making.

More information will be available on our website once developed.



More information

www.landscape.sa.gov.au/mr

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Many of the images in this document have been provided by young photography competition entrants who have captured subject matter that is important to them. We would like to acknowledge that Demi Taylor, Tahli Allen, Cameron Dixon and Coen Pearson have contributed images to this document.



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Government of South Australia

Murraylands and Riverland
Landscape Board