



Diversification of uses in South Australia's pastoral lands

Peacock, S; Wickes, R

¹ Department for Environment and Water, South Australia; ² Pastoral Board of South Australia

Key words: rangelands; diversification; pastoral; South Australia

Abstract

Recent changes to South Australia's legislative framework are designed to enable a diversity of new industries and activities on pastoral land. These changes open up new opportunities for collaboration and diversification of a pastoralist's income streams, supporting the sustainable operation of pastoral businesses, improving long term conservation in a changing climate and increasing use of pastoral lands for a range of different purposes.

South Australia's pastoral lands have been developed from the 1850s to provide a sustainable resource for cattle and sheep grazing, producing high quality food and fibre as part of the state's thriving agriculture industry.

There are 322 pastoral leases making up 219 stations over an area of 40 million hectares, roughly 40% of South Australia.

However, pastoralism is now only one industry thriving on our pastoral lands, and pastoralists have increasingly needed to work in partnership with a range of other users, including First Nations, mining, tourism, and conservation. Major new industries and markets are also emerging on pastoral land, including carbon farming, renewable energy and nature markets, providing new opportunities and challenges.

Regulation of South Australia's pastoral lands commenced in 1842 and legislation has been regularly updated to reflect changing community values and uses. Recent changes to the *Pastoral Land Management and Conservation Act 1989* were made to clarify that pastoral leases can be used for conservation and carbon farming. The *Hydrogen and Renewable Energy Act 2023* has also been introduced to provide the ground rules for a major renewable energy industry that will be developed in collaboration with pastoralism.

Introduction

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However, pastoralism is now only one industry thriving on our pastoral lands, and pastoralists and First Nations people have increasingly needed to work in partnership with a range of other users, including mining, tourism, and conservation organisations. Major new industries and markets are also emerging on pastoral land, including carbon farming, renewable energy and nature markets, providing new opportunities and challenges.

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Discussion

Background

To enable the development of the pastoral industry, this Crown (government) land was allocated via pastoral leases (originally for 14 years under the Waste Lands Act 1846, then for 21 or 42 years under the first Pastoral Act in 1893). There are currently 322 pastoral leases making up 220 stations over an area of 40 million hectares, roughly 40% of South Australia. Pastoral leases originally enabled the occupation and use of Crown (government) land for the purpose of grazing or raising livestock (pastoralism).

Pastoral leases exist alongside Native Title, which protects the rights of First Nations peoples to access and use this land for traditional purposes. Native Title exists over most of the state's pastoral lands. Some Native Title owners also own pastoral leases or manage them under sub-lease from another lessee.

The *Pastoral Land Management and Conservation Act 1989* regulates pastoral land. Leases are issued by the Minister (on behalf of the Crown) for 42 years. The Pastoral Board oversees management of these leases, undertaking assessments of the condition of each lease every fourteen years. Providing the land condition remains good, the lease is extended again to 42 years, providing certainty for lessees. It also provides the opportunity for the Board to intervene and change the lease conditions if that land is at risk of degradation.

Changing land uses

After this land was allocated as leases for pastoralism, a range of other industries and demands have grown over time. Historically, mining and tourism have been the other major industries utilising these lands, generating significant economic returns for the state.

- Mining is managed through a separate regulatory system, which also recognises the important role of pastoral lessees and First Nations people. There are important interactions between these systems, to enable access, operation and rehabilitation of mining operations on pastoral land in a way that accommodates the other uses of the land.
- Tourism has included a mix of activities, some based on pastoral leases, and others needing access through pastoral leases, travelling on station tracks, camping or staying in lodgings. Many of these activities benefit pastoralists by adding an income source. Outback tourism has been considerably boosted in recent years as travellers have had a greater choice of inexpensive equipment for remote area travel.

In recent times, both external and internal drivers are also demanding new, flexible approaches to pastoral land.

- Within the industry, pastoralists have increasingly sought to diversify their businesses, seeking other revenue sources that can help to provide stability and resilience to offset the seasonal and market variations that continue to challenge agricultural enterprises. This need for diversification is likely to increase in the future as climate change continues to increase risks to production.
- Outside the pastoral industry, there is also strong demand for pastoral land to support carbon emissions mitigation, take advantage of emerging renewable energy industries, and enhance conservation measures to help to address the biodiversity crisis.

Carbon farming

Carbon farming is a growing industry in Australia, and potential for carbon storage in rangelands provides for the mitigation of carbon emissions, which can help producers achieve carbon neutral agricultural production, and/or provide an alternative revenue stream to provide pastoralists with greater resilience and options to complement their livestock businesses. With low rainfall and low rates of vegetation growth, carbon storage per hectare is low, but with projects over very large areas, there is still potential for significant vegetation-based sequestration. Carbon farming projects have been approved on eleven leases to date, mainly in the Gawler Ranges and Murraylands & Riverland districts. Carbon storage assessment is based on a change in management practice such as changing the extent and intensity of grazing which can include the control of feral animals. This may also include the exclusion of livestock at times but dual use of rangelands for carbon and pastoralism is encouraged. Existing methods which recognise these activities, are currently being reviewed by the Australian Government.

Renewable energy

The renewable energy industry is seeking to use pastoral land, which provide some of the world's best solar and wind resources. The industry is developing at a very significant scale, particularly to support the emerging hydrogen industry. The South Australian Government has established a new legislative framework to enable this industry to flourish on both pastoral and other land, while accommodating the existing uses of land, including pastoralism. The initial focus for projects will be in the Gawler Ranges area where it is close to electricity transmission infrastructure and to a new hydrogen production hub on the Eyre Peninsula.

Development of these industries are likely to provide significant benefits to pastoral leaseholders and Native Title holders, through increased revenue streams that will help to complement their businesses. However, there is also likely to be significant impacts on these landscapes, such as development of track networks which alter water flow, spread of weeds and a reduction in the area available for grazing. Regulators are working with developers and pastoralists to manage these impacts and support sustainable outcomes.

Conservation

The increasing prominence of the global and national biodiversity crisis has placed emphasis on the need to look after these lands. While grazing has transformed the region's landscapes over the last 175 years, there remains significant biodiversity on South Australia's pastoral lands which have been less intensively developed than densely settled areas. This complements several large and valuable protected areas established in the region, such as the Kati Thanda – Lake Eyre, the Ikara-Flinders Ranges and the Munga-Thirri-Simpson Desert National Parks.

Many pastoralists work to protect this biodiversity alongside their pastoral operations, supported by regulatory instruments such as Heritage Agreements and funding from biodiversity offsets associated with mining and other developments in the region.

Several leases have also been purchased by conservation organisations in a range of land systems, to dedicate large areas of private land to conservation. Many of these purchases were supported by national and state government funding to protect biodiversity on pastoral land, and in more recent times crowd funding has also been used to support the purchase and operation of these leases.

Currently, 21 pastoral leases, are wholly used – with the Pastoral Board's approval – for conservation, and a further nine pastoral leases include part of their area dedicated to conservation purposes. In total, around 14,400 square kilometres or 3.4% of pastoral land is dedicated to conservation purposes.

Regulatory change

Mining and renewable energy is managed under separate legislation, but otherwise, alternative uses must be approved by the Pastoral Board.

There has been debate in recent years over whether the *Pastoral Land Management and Conservation Act 1989* gave primacy to pastoral uses, and therefore whether any other uses can override pastoralism as the primary use of a pastoral lease.

Similarly, debate arose in recent years about whether pastoralists could undertake carbon farming projects on pastoral land, given the length of tenure is limited to 42 years.

The Government undertook to clarify that pastoral leases could be used for conservation and carbon farming purposes, and in 2024 the *Pastoral Land Management and Conservation Act 1989* was updated to address the areas of doubt and confirm that these activities were valid.

While there is provision to remove land from the pastoral estate and convert it to a different tenure, the preference in South Australia is to retain pastoral leases, under the oversight of the Pastoral Board, to provide a consistent set of tenure requirements and a single body to oversee it, rather than increasing the level of fragmentation and potential for conflict between neighbouring landholders.

The Board will continue to assess the condition of land on these leases every 14 years. This will help to ensure that lessees are actively managing their land and addressing issues that may be emerging in the landscape.

Lessees will still be required to meet their obligations under other legislation, such as controlling weeds and pest animals, and managing water resources.

While there is sometimes tension between pastoralists and conservation organisations, there are also opportunities for collaboration and shared learning. Joint efforts to sustainably manage pastoral landscapes and protect biodiversity, and develop new techniques, such as measuring carbon storage and vegetation growth, provide opportunities for shared outcomes.

Challenges for the future

Further challenges and opportunities will continue to test the system for managing pastoral lands. Climate change is expected to affect South Australia's rangelands dramatically, with substantial increases in temperature and changes in rainfall patterns. Vegetation growth and distribution, livestock production and biodiversity conservation are all likely to be significantly impacted, testing the ability of native species and grazing systems to adapt. Regulation will need to be alert to the changing requirements to maintain sustainable grazing regimes in the long term.

Conclusion

Building on the state's long history of adapting to emerging needs, recent changes to South Australia's legislative framework for pastoral land are designed to enable a diversity of new industries and activities. These changes create new opportunities for collaboration and diversification of pastoralist income streams, supporting the sustainable operation of pastoral businesses, improving long term conservation in a changing climate and increasing use of pastoral lands for a range of different purposes.