

NCSSA response to questions in “Planning for the future of South Australia’s Pastoral Rangelands” Discussion Paper, September 2019:

1. What do you want South Australia’s rangelands to look like for future generations?

South Australia’s rangelands continue to provide functioning, resilient and healthy ecosystems that support threatened and regionally rare plants, animals and ecological communities which are valued and protected.

2. How can this vision be achieved?

We call for the further recognition of the critical importance of the SA rangelands for nature conservation. We believe nature conservation is complementary to a modern, sustainable pastoral industry which is underpinned by a legislative framework that supports other land uses, including tourism, mining and energy production in the rangelands, provided they are either compatible with nature conservation or where their impacts can be acceptably managed.

We believe nature conservation in the rangelands could be better achieved by:

- More formalised protected areas in the rangelands, since the ecological assemblages found in the region are currently under-represented in our reserve system (see ‘Conserving Nature 2012 – 2020 A strategy for establishing a system of protected areas in South Australia’, with maps at Appendix 2 which shows the most under-represented ecosystem types, with some of the least represented occurring within the rangelands), and
- Supporting the current practice of private conservation organisations (such as Bush Heritage Australia, Australian Wildlife Conservancy and the Nature Foundation) managing pastoral leases for nature conservation by amending the Act to explicitly make clear that nature conservation is a permitted land-use and enabling protection for these areas in perpetuity, and
- Supporting nature conservation on parts of other pastoral leases where lessees seek it, for example legitimising their access to carbon and biodiversity offsetting markets, by amending the Act to explicitly make clear that these are permitted land-uses and enabling protection for these areas in perpetuity, and
- Ensuring sustainable stocking practices as part of a modern pastoral industry, which are compatible with nature conservation, managed with appropriate State Government oversight, and
- Allowing opportunity for other land uses where these are compatible with nature conservation or where their impacts can be acceptably managed.

The rangelands of South Australia cover approximately 80% of the State’s land area occupying approximately 741,000 km² and contain the largest areas of intact native vegetation in South Australia. Within this area the Pastoral Board is currently mandated to administer and monitor 322 pastoral leases that collectively occupy 410,000 km². The balance of the rangelands is set aside as Aboriginal lands, Indigenous Protected Areas, private and public nature reserves and national parks. These areas are critical for maintaining the ecological character of the rangelands, providing habitat for many fauna and flora species listed under the *Environment Protection and Biodiversity Conservation Act 1999*, state and regionally rare species and threatened ecological communities such as the community of native species dependant on natural discharge of groundwater from the Great Artesian Basin.

A particular issue of concern for NCSSA is the placement of artificial watering points, as there has been considerable research and other investigations into the impact of artificial watering points on biodiversity and habitat condition in the rangelands across Australia and overseas. These studies have clearly demonstrated the negative impact associated with artificial watering points in terms of increased and concentrated grazing and trampling pressure from not only domestic livestock, that they were installed to provide for, but also feral animals that are attracted to the watering points. In some areas there has also been a proliferation of pest plant species associated with the placement of artificial watering points. There are, however, significant areas within the South Australian rangelands that are located some distance from artificial watering points and provide significant refuges for biodiversity conservation.

It is NCSSA’s view that further protection of these areas from the negative effects associated with artificial watering points is critical for long term biodiversity conservation.

There have been a number of studies in South Australia that can provide additional data or information pertaining to the impact of artificial watering points on key biodiversity assets that should be further considered through this review e.g. Smyth et al., 2009, Fleming & Brook, 2008 and Day, 2007. NCSSA recommends that the findings of these studies are addressed in the current review and before any expansion of the pastoral industry beyond current levels of stocking proceeds if healthy native vegetation on which the pastoral industry depends is to be maintained for future generations.

Specifically, we support continuation of the role of the Native Vegetation Council, established under the *Native Vegetation Act 1992*, in deciding whether to approve additional artificial watering points on pastoral properties since these decisions impact on the condition of native vegetation.

There are a wide range of measures that can be used to enhance the resilience of ecological communities and enable them to adapt to change and disturbance. Key measures are summarised in Australia's Biodiversity Conservation Strategy 2010-2030 (Natural Resource Management Ministerial Council, 2010) and include:

- protecting diversity
- maintaining and re-establishing ecosystem functions
- reducing threats to biodiversity.

We strongly recommend the Committee refer to this Strategy for further details of targets and priorities for action in building ecosystem resilience in a changing climate – a critical issue for sustainable land management and long-term biodiversity conservation in the rangelands where climate patterns are already highly variable and characterised by extended periods of low rainfall.

3. Do you think the rangelands should be used for activities in addition to pastoral purposes?

Yes, tourism and nature conservation are both legitimate and ongoing land uses within the rangelands that contribute significantly to the State's economy and supporting local communities. Although we believe both activities are permitted under the current legislative arrangements, we understand that there is currently legal opinion to the effect that certain conservation activities are illegitimate, based on a particular interpretation of the current Act as being to promote pastoralism. We therefore support this review legitimising current conservation activities and providing a framework for their further uptake.

For example, over the past decade, several large pastoral leases in South Australia have been acquired by non-government organisations such as Australian Wildlife Conservancy, Bush Heritage Australia and Nature Foundation to establish private protected areas. These, and other private protected areas, are helping to maintain and improve the ecological resilience of the rangelands that is fundamental for their future management. These privately managed reserves complement the public reserve system and contribute to the restoration and protection of ecosystems across the broader landscape of the South Australian rangelands. However, we understand that new lease purchases for conservation purposes would not be approved under current settings and that there is currently no long-term legislative protection for such areas including from access for mining exploration or resource extraction activities.

We believe the legislative framework should be amended to remove doubt so that willing lessees can engage with, and derive income from, carbon and biodiversity offsetting markets. It will therefore be necessary to have mechanisms in place so that designated areas can be set aside in perpetuity, in order to secure the necessary carbon and/or biodiversity gains.

This approach would legitimise practices that are currently being undertaken, for example the Biodiversity Credit Exchange program being run by the Department for Environment and Water. Whilst NCSSA is not aware of any scientific evidence of biodiversity gains actually being made through such offsetting approaches and therefore does not support their widespread use, at a minimum, the area set aside and paid for through the scheme to achieve biodiversity 'credit' should be protected in perpetuity. This recognises that the biodiversity 'loss' that this credit is offsetting is permanent.

4. Should pastoralism still be the majority use of the rangelands? If not, why?

Where it is environmentally sustainable, pastoralism is appropriate in the rangelands. However, there are some areas of the rangelands where pastoral production is marginal in terms of ability to generate an income to support families/farmhands etc particularly during dry seasonal conditions that are a common occurrence in the arid/semi-arid rangelands and expected to increase with the effects of climate change. To overcome this, many landholders have expanded their businesses to include tourism opportunities such as 4WD tracks and accommodation that generate a significant income during the “tourist season”. We believe this should be supported, as well as deriving income from carbon and biodiversity markets, as mentioned earlier.

In deciding where pastoralism is appropriate, NCSSA advocates that, wherever practicable, riparian areas, wetlands and refugia should be excluded from grazing by domestic livestock, considering the important ecological function and biodiversity values of these areas.

5. What do you think is meant by ‘good land condition’?

This term refers to the condition of the soils, vegetation and water that support the pastoral industry in the rangelands. The Land Condition Index (LCI) was developed for pastoral lease condition assessment in South Australia from 1990 to 2000, and enables a scientifically rigorous assessment of the stocking capacity of a property and identification of land degradation issues such as salinity, erosion and feral animals that are causing degradation. It is based on the observation that under grazing, some plant species decrease, and others increase, so that observation of the species composition of enough sites across a property effectively assesses the grazing condition of a property. Good land condition is reflected in healthy native vegetation communities, where grazing by stock, feral and native grazing animals is being managed sustainably and where the impacts of pest plants and animals are low.

6. Should government decide what the standard of ‘good land condition’ is? What constitutes sustainable use for the rangelands?

Yes – the existing system of assessing pastoral leases undertaken by the Pastoral Assessment Unit within the SA Government is critical for ensuring grazing is undertaken in a sustainable manner and that soil erosion, pest plant and animal issues are addressed. One area that NCSSA believe should be addressed through the current review is the mechanism for determining stocking rates for pastoral properties and the need to accurately consider an ongoing assessment of feral herbivore densities to ensure that sustainable stocking rates are not exceeded.

Sustainable use for the rangelands varies according to land tenure and land use. In areas where grazing of living stock is the main land use, sustainability involves managing total grazing pressure from stock, feral and native herbivores to allow vegetation communities to persist with regular grazing. It also requires sustainable use of precious water resources that are largely derived from underground aquifers. In areas where conservation and tourism are the primary land use sustainability issues relate more to development of infrastructure such as roads/tracks that provide access and camping areas. Such developments need to consider the environmental impacts they may have on the local area and surrounding vegetation.

Managing stock during drought is a critical part of successful overall grazing management. It is during droughts that the potential for substantial long-term damage to natural resources can arise because of the decreasing ratio of forage availability to livestock numbers and the moisture stress that plants are under at these times. There can also be a tendency for livestock to use parts of the landscape that are usually avoided or used only minimally. This grazing pressure may compromise the natural resource values of these areas, which might otherwise have good biodiversity values.

Vegetation should be allowed to recover for some months following the breaking of a drought before restocking. Rapid restocking after drought may assist a pastoral enterprise financially but could compromise the recovery of the vegetation or cause the death of plants if they are heavily grazed at an early stage of regrowth. The same applies to grazing soon after a fire.

NCSSA therefore advocates strongly for the protection and enhancement of native vegetation in the pastoral zone through effective management of total grazing pressure and continued resourcing for the Pastoral Assessment Program to monitor and manage the condition of vegetation on pastoral leases throughout the State. We suggest that the

current review provides an opportunity to undertake further analysis of information gathered through the Pastoral Assessment Program in terms of the condition of pastoral leases across the state and sustainability of land management practices as a key part of the planning for the future of the rangelands.

7. Are there any issues that need to be managed at a whole of landscape level, rather than at an individual property level?

NCSSA believes that management of total grazing pressure from both introduced and native herbivores is a critical component in preventing degradation of native vegetation that requires careful vigilance by all landholders regardless of tenure.

Management of Feral Goats in the rangelands south of the Dog Fence is a significant issue that needs to be addressed if good land condition is to be maintained. Co-ordinated and ongoing control efforts across large areas and multiple properties are required to reduce goat numbers effectively. We are aware that many hundreds of thousands of feral goats have been mustered and culled from the southern parts of the rangelands in South Australia both by pastoralists, private landholders and the Department for Environment and Water through co-ordinated regional control programs yet they remain a serious threat to the condition of vegetation, soil and water resources in areas where they occur.

Under favourable environmental conditions, goat populations can increase by up to 50 per cent each year. In high densities, unmanaged goats present a potential threat to plant communities because of the large number of plant species that are palatable to them (Squires 1980, Henzell 1993, Parkes et al. 1996). Moreover, the ability of unmanaged goats to survive on low-nutrient fibrous vegetation (Doyle et al. 1984) enables them to continue to feed under adverse environmental conditions, increasing the risk of overgrazing.

Competition and land degradation by unmanaged goats was listed as a key threatening process under EPBC Act in 2000. A [Threat Abatement Plan](#) is in place for Competition and land degradation by unmanaged goats that sets out a national framework to guide coordinated actions to contain the spread of this threatening process and manage the impact on threatened species and ecological communities. A five-yearly review of the TAP was undertaken in 2013 (Department of the Environment, 2013) and, not surprisingly, concluded the 2008 TAP had not achieved the goal of minimising the impacts of feral goats and that the complexity of the problem of the impact of feral goats is increasing as feral goat numbers rise.

Co-ordinated and ongoing control efforts across multiple landholdings are also necessary for the management of feral camels in the rangelands of northern South Australia where they are distributed over 589,000 km². Feral camels pose a significant economic, environmental and social/cultural threat to the rangelands across Australia. Current populations already cause over \$10 million damage annually, and cause damage to native vegetation, destroy infrastructure, damage wetlands/water holes, and culturally significant sites. The main environmental impacts include

- broad landscape damage including damage to vegetation through foraging behaviour and trampling, suppression of recruitment of some plant species,
- selective browsing on rare and threatened flora,
- ability to cause local extinction of plant species such as Quandong, Plumbush, Bean tree, and Curly Pod Wattle
- damage to wetlands through fouling trampling and sedimentation,
- competition with native animals for food and shelter, and
- loss of sequestered carbon in vegetation

Another key threat to the health of vegetation in the rangelands that requires co-ordinated control across landholdings is the spread of pest plants such as Athel Pine, Buffel Grass and a range of opuntoid cactus species. NCSSA opposes the introduction and spread of invasive (and potentially invasive) taxa of pasture plants for domestic livestock. We support the development and implementation of management plans for invasive pasture species and other pest plants in the rangelands to halt and reverse their spread where they pose a threat to biodiversity.

Kangaroos have benefited from the installation of water sources for domestic stock across the rangelands. Numbers are considered to be higher now than at the time of European settlement, particularly in the sheep rangelands, where dingo numbers are low due to exclusion fencing or intensive control activities (Pople & Grigg 1999).

Kangaroos are recognised as having the potential to negate the benefits of destocking for rehabilitation purposes in areas where their numbers are high, and to compete with domestic stock for palatable grasses and forbs. Often when destocking of domestic stock takes place, kangaroo numbers can increase (as can feral numbers) as a result, and this can mean that there is little or no net reduction in total grazing pressure. While dietary preferences do differ among herbivore species, there can still be a negative impact on biodiversity (especially native plant diversity) through increased kangaroo numbers. Hence, it is sometimes necessary for kangaroo numbers to be controlled in national parks also. Ideally an integrated approach should be adopted in reducing total grazing pressure on pastoral lands, where domestic, feral and native herbivores are all reduced simultaneously.

8. Are 42 year leases appropriate, or do you believe different lease length should be considered?

The reasons for varying lease length need to be further explored through this review process, with the arguments for and against doing so clearly outlined.

Regardless of the lease length, however, and as mentioned earlier, NCSSA believes the system of State Government oversight of native vegetation condition in the rangelands, underpinned by assessments at regular intervals overseen by an independent Board should continue, with appropriate, proportional responses for non-compliance, in order to ensure sustainable land management practices are being adhered to. Assessments are currently undertaken at 14 year intervals, however, it given the size of the area and the variability of native vegetation condition both through time and space, it would give greater confidence in decision-making to assess land condition more frequently. NCSSA encourages the further uptake and formalisation of remote sensing techniques, combined with on-ground assessment, in order to reduce costs, to strengthen the current approach and to be able to identify issues that require addressing more quickly.

9. If longer leases were considered, how would this transition occur for the current lessees?

This could be considered pending the outcome of deliberations on question 8, however, all leases should still be granted subject to requirements for sustainable land management, regardless of length.

10. Consistent with the retention of the section 47 provisions, are there matters this review should consider that will help realise the greatest value from the rangelands, maintain the condition of the land and improve economic and cultural opportunities for Aboriginal people in the rangelands?

NCSSA supports access to land for Aboriginal people following traditional pursuits. Any opportunities that could improve economic and cultural wellbeing for Aboriginal people in the rangelands should be explored through this review.

11. How can we create flexibility for a range of uses in the rangelands while preserving land condition and supporting the productivity and profitability of pastoralism?

In NCSSA's view, the primary objective of the Pastoral Land Management and Conservation Act 1989 (the Pastoral Act, or whatever might replace it following this review) is to protect the key resource of the rangelands, which is its native vegetation on which the pastoral industry depends.

If any new Act (or amendments to the existing Act) is framed around this principle, then any new (either specified in the Act or currently unforeseen) land use can be considered against its potential to impact on the resource, e.g. the condition and extent of native vegetation in the rangelands.

In our view, the decision regarding whether to allow new uses would best sit with an independent Board, resourced with its own budget and staff.

From NCSSA's perspective, 'flexibility' for a range of profitable purposes should explicitly include nature conservation, and as stated earlier, should support, legitimise and promote nature conservation in the rangelands.

12. How should mixed uses of one site be managed as there may be different land impacts?

The land impacts of each use will need to be assessed, both for impact on native vegetation and compatibility with each other.

13. How should government manage who occupies the rangelands, and what they can use the land for?

The suggestion of a system of leases to land and licences for specific activities seems to have merit and could be further explored through this review process.

14. If occupation and use are managed separately, can it be ensured the process is streamlined, responsive and cost effective?

This could be addressed in the drafting of any new or amended legislation, and in its implementation.

15. What are some potential off-lease impacts and how should these be managed?

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16. Should there be an ability to enter into agreements on pastoral land that extend beyond the term of the lease? If so, who should benefit from these arrangements and why?

As mentioned earlier, NCSSA supports nature conservation on pastoral land, and one way of achieving this is to enter into binding agreements to secure areas, either entire lease areas or sections of lease areas, including those that have been set aside to capture carbon and/or preserve biodiversity. By definition, these agreements would need to extend beyond the term of the lease as they would need to be in perpetuity (in most cases) in order to secure the desired environmental benefit. In these cases, the beneficiaries would be the lease holder in terms of income from the offset market (for the time they hold the lease), and the South Australian public in terms of the ecosystem services of climate stabilisation and nature conservation. An independent Board could approve such long-term or permanent agreements and the impact of doing so could be factored into future calculations of lease costs.

17. Do you agree public access to the pastoral rangelands should be preserved? If so, why?

Yes, public access should be preserved because it allows for travel to places of interest and is necessary to support a range of uses, including tourism, within the rangelands.

18. How should public access to the pastoral rangelands be managed?

As stated in answer to the previous question, public access should be maintained to allow for travel to places of interest. Where conflict or issues arise regarding public access, an oversight body is needed to make decisions and guide resource use regarding either facilitating or restricting access. In our view, this role would best fit an independent Board (such as the current Pastoral Board or a body that replaces it in a new Act) equipped with decision-making criteria, resourced with its own budget and staff, to make decisions and to facilitate the resolution of conflicts as needed.

19. Who should be responsible for monitoring and maintaining the provision of public access?

NCSSA support the ongoing responsibility of the Minister for the care, control and management of public access routes (PAR) however recommend that further resources are required to monitor and maintain the PAR network.

20. How can flexibility and access to the rangelands be improved?

No further comment

21. How can interactions between mixed uses of the rangelands be clarified or improved?

The need for access and the potential for 'intersecting' land use points to the need for an oversight body to make decisions and guide resource use regarding access. In our view, this would be an independent Board equipped with decision-making criteria, resourced with its own budget and staff, to make decisions and facilitate the resolution of conflicts or tension between different land uses.

22. How do we ensure decisions are objective, consistent and responsive?

NCSSA supports the continuation of a model of governance of an independent Board to make decisions regarding the appropriate use of the rangelands. However, in order for this system to work well, the Board must be comprised of a cross section of interests groups as well as be resourced with its own budget and staff. This is particularly important if the speed of decision-making is of concern to lease holders.

23. How should governance decisions be made? Should all decisions be made in the same way?

As stated in answer to the previous question, NCSSA supports the continuation of a model of governance of an independent Board to make decisions regarding the appropriate use of the rangelands. It may be necessary to 'delegate' some decisions to departmental staff to ensure that the Boards resources are focused on strategic issues of concern to the broader pastoral sector, rather than on resolving individual disputes.

24. Do you think the Pastoral Board and the Dog Fence Board should be combined into a single Board? If so, why?

This review offers the opportunity to reflect on governance arrangements for the rangelands. There are some synergies between the remit of the Dog Fence Board and the current Pastoral Board, although NCSSA notes that only a small number of South Australian lessees would be directly impacted by the day-to-day workings of the Dog Fence Board.

In reviewing governance, it is also worth noting that natural resource management in South Australia is guided by Natural Resource Management Boards (likely to soon be Landscape Boards with the *Landscapes SA Bill* currently before State Parliament).

Regardless of whatever precise governance model is decided, NCSSA supports continued State Government oversight of the condition of pastoral leases overseen by an independent Board, resourced with its own budget and staff.

With respect to dingo and wild dog control, NCSSA acknowledges the challenges involved in the management of dingoes and wild dogs in South Australia due to the competing perceptions on whether they require protection, as a legitimate wildlife species with important ecological and cultural roles, or a serious pest to the pastoral industry. We advocate for recognizing the role of the dingo in Australia's ecosystems and for the strategic management of dingoes based on scientific evidence. NCSSA believe that the current management practice of the lethal control of dingoes and wild dogs should be reviewed since the available evidence suggests that baiting may not reduce stock kill north of the dog fence. Rigorous, long-term monitoring and evaluation of current approaches should be undertaken. At the same time, the use of guard dogs to protect stock should be trialled with willing landholders.

25. What assessment and compliance should be in place to manage risk? What obligations should be on different parties?

Resources should be made available to assess the condition of pastoral leases in a timely and accurate way.

26. Do you agree that assessment and compliance action should be commensurate to the risk the activity poses to land condition?

Yes. In contemplating a new Act or amendments to the existing Act, appropriate, proportional compliance responses should be included. At the moment, the consequences of either a fine or lease termination for non-compliance represent the two ends of the compliance spectrum regime, with no 'steps' in between.

27. Should government have the active role of monitoring and managing the landscape?

Yes, NCSSA believes this role is critical.

28. Do you agree land value is the most appropriate way to determine lease costs?

No comment

29. Should costs vary based on how the land is used and the intensity of assessment and compliance required?

It is reasonable to consider, as part of this review, whether lease fees should reflect the costs to the South Australian public of assessment and compliance of different land uses.

30. Are there any other topics not identified in this discussion paper on which you would like to provide feedback?

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