Introduction
This audit assessed whether there is a coordinated and effective approach to protect the ecological sustainability of pastoral lands.

We focused on strategies to understand environmental condition and compliance programs to prevent degradation and rehabilitate land. We sought extensive feedback from a range of industry and government stakeholders, who are involved in the management of the pastoral estate and neighbouring land tenures.

Background
Western Australia’s (WA) rangelands cover 87% of the State. They are administered by the State Government. Around 39% of the State’s rangelands (87 million hectares) is under pastoral lease. The remainder consists of unallocated Crown land (UCL), land reserved for conservation or indigenous purposes, non-pastoral leasehold, and freehold.

The pastoral industry commenced in WA in the 1860s. By 1910, the Crown had assigned most of the suitable grazing country to lessees through pastoral lease arrangements that exist in some form to this day. All pastoral leases expired on 30 June 2015. On 1 July 2015, the Minister for Lands renewed leases on 435 pastoral stations for periods of 18 to 50 years. The majority are located in the Southern Rangelands (Table 1).

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of stations</th>
<th>Land area (million ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Rangelands (Carnarvon/Gascoyne, Murchison and Goldfields/Nullarbor regions)</td>
<td>286</td>
<td>52.3</td>
</tr>
<tr>
<td>Kimberley</td>
<td>92</td>
<td>21.2</td>
</tr>
<tr>
<td>Pilbara</td>
<td>57</td>
<td>13.0</td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>86.5</td>
</tr>
</tbody>
</table>

Source: Department of Planning, Lands and Heritage

Table 1: Pastoral leases in WA

The Kimberley region in northern WA is characterised by highly productive grasslands in the river valleys, extensive areas of low pastoral potential, and reliable rainfall. It is also prone to fire. The region has produced beef cattle since pastoralism commenced and sheep grazing was significant until the 1960s. In contrast, the Pilbara region is dominated by low woodlands over spinifex grasslands. The Southern Rangelands are predominantly less productive shrublands, with high rainfall variability and extended periods of drought. Sheep dominated these 2 regions until the 1990s when the Australian Wool Corporation’s Reserve Price Scheme, a government initiative to stabilise wool prices, collapsed.

Beef cattle is now the focus for 324 of the 435 stations. Only 69, all in the Southern Rangelands focus on sheep and/or goat production, and the remaining 42 are destocked.

Pastoralists traditionally generate income from the sale of livestock and wool. Ongoing productivity depends on good pastoral management, and land condition. Land in good condition can support extensive livestock grazing on native pastures, land in poor condition cannot.

Pastoral leases are also held for reasons other than pastoralism. Examples include leases held by mining companies, indigenous groups for cultural and lifestyle purposes, and philanthropic
groups for conservation (Table 2). Some lessees, such as mining companies and Aboriginal corporations, engage land managers and have limited input into day-to-day pastoral business. Other small-scale activities such as tourism, agriculture, and businesses contracting to the mining sector are also common.

<table>
<thead>
<tr>
<th>Customer type</th>
<th>Number of stations</th>
<th>% of area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal corporation</td>
<td>55</td>
<td>12.5</td>
</tr>
<tr>
<td>Company (foreign mining)</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Company (foreign owned)</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>Company (mining)</td>
<td>29</td>
<td>6.2</td>
</tr>
<tr>
<td>Company (private)</td>
<td>178</td>
<td>43.1</td>
</tr>
<tr>
<td>Company (public)</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Government department/authority</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Individual</td>
<td>149</td>
<td>32.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>435</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: DPLH

Table 2: Ownership of pastoral leases in WA in August 2017

Pastoral leases exist in a complex matrix of land tenures and uses (Appendix 1). Native title rights, which recognise the unique ties indigenous groups have to the land, and mining and widespread mineral exploration activities, commonly occur on pastoral lands. Regardless of tenure, the land requires people on the ground to manage it.

Reports over the years have highlighted a decline in rangeland condition (Appendix 2). In 1940, a Royal Commission, following the 1930s Great Depression and drought, reported widespread decline in stock feed with sheep numbers falling by up to 70% in some areas. In 2015\(^1\) the then Department of Food and Agriculture WA (DAFWA) reported ongoing decline and serious implications for the sustainability of the pastoral industry and the State’s resource.

This is the third audit of Pastoral Lands Board (PLB) activities conducted by the Office of the Auditor General. Previous audits assessed the Administration of the Pastoral Leasing Process (1994) with consideration for long-term sustainable development and economic return, with a follow-up audit in 1996. Recommendations included:

- the then Pastoral Board and Department of Agriculture consider developing an integrated information system to serve as a common reference for pastoral leases
- procedures for follow-up compliance with lease conditions and recommended land management measures should be enhanced
- operational policies and assessment procedures should be documented.

**Roles and responsibilities**

Managing pastoral lands involves many government (Appendix 3) and non-government agencies, private businesses, indigenous organisations and individual lessees.

The PLB is a statutory authority established under section 94 of the *Land Administration Act 1997 (LA Act)*. In accordance with Part 7 of the LA Act, the PLB and the Minister for Lands administer pastoral leases. The PLBs functions include to advise the Minister on policy and the administration of leases, ensure leases are managed on an ecologically sustainable basis,

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develop policies to prevent degradation and rehabilitate degraded land, and develop and implement monitoring systems for pastoral land, livestock and feral animals.

The PLB is supported by:

- Department of Planning, Lands and Heritage (DPLH) – provide administrative services
- Department of Primary Industries and Regional Development (DPIRD) – provide services, which include lease assessment and inspection, and advice on applications for diversification permits, land management and land condition trend. A memorandum of understanding (MoU) between the PLB, DPIRD, the Commissioner of Soil and Land Conservation (the Commissioner) and the then Department of Regional Development and Lands expired in 2015.

Under the LA Act lessees must manage the land to its best pastoral potential to the satisfaction of the PLB, whilst the PLB must ensure that pastoral leases are managed for ecological sustainability. To achieve this, land condition, which is defined by DPIRD as the presence of perennial plant species attractive to livestock as fodder, and the condition of the soil, must be maintained. This presents challenges that include: minimising the impact of other land uses, such as mining and exploration, road works, and tourism; preventing and rehabilitating historic and ongoing land degradation; variability in how pastoral leases and adjacent lands are managed; decline in market prices and income; and isolation.

Sections 108 and 111 of the LA Act also requires that lessees:

- use methods of best pastoral and environmental management practice for the management of stock, and for the management, conservation and regeneration of pasture for grazing
- maintain the indigenous pasture and other vegetation to the satisfaction of the PLB
- control declared pests.

Audit conclusion

The ecological sustainability of pastoral lands is not adequately protected by the State’s current system of land monitoring and administration. Pastoral lands have been under threat for over 75 years and during that time there has been limited progress to halt the decline in pastoral land condition.

Current knowledge of the environmental condition of individual leases is poor. A reduction in the scope of monitoring since 2009 and limited use of remote sensing tools has contributed to a lack of understanding of land condition at the lease level, and restricted visibility of the extent of land condition issues across the pastoral estate. Future sustainability of the pastoral industry and the Crown’s land estate relies on being able to make informed decisions on how to address existing issues and prevent new ones.

The lead up to the 2015 lease renewal process resolved a significant number of outstanding land condition compliance issues. Since then, DPLH has adopted a pastoral liaison approach to its compliance work. However, this work is not well documented and does not provide good visibility into the extent of land condition issues or what is being done to address them. A rigorous documented compliance program is essential to ensure appropriate stewardship of Crown land.

A lack of support and guidance is impeding opportunities to achieve social, environmental and financial outcomes for pastoral businesses and their surrounding communities. There is a need for the PLB, DPLH and DPIRD to explore opportunities to provide guidance to lessees on good practice land management and streamline diversification processes to protect our valuable pastoral estate and address these issues.
Key findings

The State does not have good knowledge of lease level land condition
The PLB relies on limited lease monitoring as part of its role to oversee and administer the pastoral estate. Since 2009 the scale of lease monitoring declined from 15% of all leases inspected each year to less than 3%. At the current rate of 20 lease inspections per year it will take more than 20 years to inspect each lease once. The PLB is unable to fulfil its mandated function to ensure individual leases are managed on an ecologically sustainable basis. Monitoring is also important, to assess if diversification projects are capable of improving land condition.

Between 2012 and 2015, DPLH led an audit to ensure lessees were compliant with the LA Act before the 2015 lease renewals. Over 500 outstanding directives were reduced to 34 by the time leases were renewed on 1 July 2015. This provided the PLB with a renewed basis on which to conduct compliance and enforcement activities. DPLH adopts a pastoral liaison approach to its compliance activities, in preference to issuing and following up on compliance directives. However, without comprehensive lease monitoring, the extent of land condition issues across the State is not well documented under this approach, leading to a high risk that broader scale degradation will continue.

The State's use of remote sensing technology to help monitor and understand changes in land condition at the lease level and across land tenures is limited. DPLH and DPIRD have independently worked to develop monitoring systems using remote sensing technology. But, difficulties interpreting remotely sensed data are in part responsible for delays in adopting the technology as a land management tool. Given reductions in agency resources, and the size of the pastoral estate, incorporating long-term remote sensing monitoring would provide more reliable trend information to inform management decisions, and allow the State to better use available resources.

Lessees receive limited support to manage the land for long-term productivity
The decline in DPIRD’s pastoral liaison, advisory, research and compliance functions over the last decade, has contributed to limited opportunities for knowledge exchange with pastoralists. There are many examples of good practice driven by lessees, often aided by not-for-profit and private organisations, but little evidence that agencies help to develop and share this knowledge. The result is slow uptake of established regeneration techniques and insufficient landscape rehabilitation to reverse existing degradation.

The process to apply for a diversification permit to conduct activities on a pastoral lease is not transparent and can be lengthy. Proponents face a range of approval processes under different legislation and from multiple agencies. Pastoralists we spoke with expressed frustration in the process, highlighting delays to acquire multiple agency approvals, and significant up-front investment with no guarantee of the outcome. Pastoralists are looking at diversification options to facilitate improvements in land condition by reducing broad scale grazing pressure, and a method to improve economic and social outcomes.

At 1 June 2017, DPLH were managing 115 diversification permits. Between January 2015 and June 2017, the PLB received 54 diversification permit applications. Seventy-one percent of the 28 permits issued by the PLB in that time fell within DPLH's suggested 6-month timeframe. However, 5 were still waiting for a permit more than 12 months after initial application.

The State’s Land Tenure Pathway for Irrigated Agriculture aims to increase transparency by outlining the process to develop land for irrigated agriculture. The pathway is detailed but has only been used to date for larger-scale industry development, due to the significant costs involved with completing some of the requirements under legislation such as the Mining Act 1975 and Environmental Protection Act 1986.
Policies and agency information management offer little to support a sustainable pastoral industry

The PLB does not have policies and procedures to guide the long-term environmental, economic and social management of pastoral lands. For example:

- there is no accepted definition of 'ecological sustainability' despite the LA Act requirement to ensure leases are managed on an ecologically sustainable basis
- no policies to guide rehabilitation of degraded or eroded rangelands
- there are no action or implementation plans to support the PLB to achieve its Strategic Plan.

The sustainable use of natural resources and healthy functioning ecosystems are important to both the State, as the land owner, and the pastoral industry, as land users.

In 2015 the Public Sector Commission (PSC) recommended DPLH work through its ‘Good Governance Checklist’ with the PLB. In recognition that more is required, the PLB and DPLH have prioritised defining ecological sustainability. The PLB’s Strategic Plan and Rangeland Management Compliance Policy and Procedures also represent recent effort to focus more on strategic priorities. A new, independent Chair, appointed in January 2017, provides further opportunity to refocus PLB priorities.

Inadequate data and knowledge management within DPIRD and DPLH is affecting their ability to best administer and guide land management. Important DPIRD research on land condition is not made available to the pastoral industry and lease information is poorly managed. The State does not have a comprehensive and accessible record of land condition and pastoral management information.

Shrinking agency resources and shifting priorities have also affected DPIRD’s ability to provide the services sought by the PLB, DPLH and lessees. Information is siloed with a few key individuals, many of whom are nearing retirement. An MoU for service provision by DPIRD to the PLB expired in 2015 and has not been renewed to reflect the reduction in services. The PLB, DPLH, DPIRD and the Commissioner have been working to finalise a new MoU that reflects changes in priorities and resources.
Recommendations

1. By the end of June 2018, the PLB should:
   a. finalise an MoU for DPIRD service provision
   b. define and adopt an inter-agency definition of ‘ecological sustainability’ for pastoral lands
   c. develop an annual action plan to accompany its Strategic Plan to inform pastoral land management.

2. By the end of December 2018, the PLB, with support from DPLH, should:
   a. develop and implement a rigorous compliance program based on regular land condition monitoring that includes a combination of risk-based and systematic inspections, and checks of pastoral lessee annual returns
   b. develop an accessible inter-agency database that contains lease compliance and compliance-related monitoring information
   c. increase opportunity for agency, lessee and stakeholder engagement to promote better coordination of pastoral land management by all entities involved
   d. undertake an independent review of its performance in line with the PSC’s Good Governance Checklist.

3. By the end of December 2019, the PLB, with support from DPLH and DPIRD, should:
   a. develop and implement a reliable statewide system to monitor changes in land condition within the rangelands:
      i. to inform land management activities across land tenure boundaries
      ii. at the individual lease level
      iii. that includes both remote sensing technology and ground monitoring
   b. develop, publish and circulate policies to prevent the degradation of rangelands and to rehabilitate degraded or eroded rangelands to restore their pastoral potential, as prescribed under the LA Act
   c. provide guidance on good practice soil, vegetation, stocking and feral animal management techniques, and rehabilitation techniques, to protect and improve the environmental condition of pastoral lands
   d. develop an inter-agency permit approvals process with timelines for each agency, transparency for proponents, and options to streamline and fast track standard applications.
Board and agency responses

Pastoral Lands Board

In general terms, the Board supports the broad directions of the report however would like to make the following comments:

- The Board recognises the significant task it has to ensure pastoral leases are managed responsibly and in a way that does not compromise the important natural asset that is Western Australia’s pastoral estate. This is a complex task involving multiple government and non-government agencies, major private businesses, Indigenous organisations and many individual lessees. In this context, the most successful approach to management of the pastoral estate requires an appropriately resourced and somewhat independent board that can effectively pull the disparate parts of the pastoral industry together;

- The Board believes that it is essential that “ecological sustainability” as used in the scope of the Performance Audit must be examined within a pastoral context. Pastoral lessees are statutorily required to manage their leases by applying methods of best pastoral and environmental management practice, and the Board has a role in ensuring that this occurs. Any industry reliant on the presence of native vegetation, such as pastoralism, has a vested interest in ensuring sustainable use of natural resources; a key challenge in the context of a lease that allows for the grazing of non-native animals in an environment which is not well adapted to them along with wild dogs, goats, horses and camels. Subsequently, pastoral lessees have an incentive to work within a ‘triple bottom line’ management framework; and

- The Board agrees that additional rangeland condition monitoring, both in the form of satellite monitoring and on ground inspections, would assist it to ensure that pastoral leases are managed on an ecologically sustainable basis. The need for more effective monitoring is broadly supported noting the breadth and scale of the task, contextualised against resourcing and geographical constraints, will necessitate innovative approaches to achieving this objective. The Board and the Department of Planning, Lands and Heritage, in collaboration with the Department of Primary Industries and Regional Development, will explore opportunities to increase the level and effectiveness of monitoring along with recording and dissemination of outcomes. This may include better utilisation of technology coupled with partnering with stakeholder or local groups (for example Aboriginal Ranger programs) to improve the effectiveness of the monitoring regime.

Department of Planning, Lands and Heritage

The Department of Planning, Lands and Heritage (DPLH) in general terms supports the key findings of the report, subject to a number of minor comments against some of the individual findings.

DPLH accepts all of the recommendations made in the report, noting that implementing a number of the recommendations by the suggested timeframes will ultimately be a function of available resources. DPLH and the Pastoral Lands Board (PLB) have already commenced implementing several recommendations, including:

- Finalising a Memorandum of Understanding in relation to service provision to the PLB from both DPLH and the Department of Primary Industries and Regional Development (DPIRD);

- Supporting the PLB to define an Action Plan to implement its Strategic Plan;

- Assisting the PLB to draft a policy on the interpretation of ecological sustainability in the context of pastoral land, with supporting guidance for pastoral managers on good practice land management; and
Engaging at senior level with DPIRD, the Department of Water and Environmental Regulation (DWER) and the Department of Biodiversity, Conservation and Attractions (DBCA) in relation to interagency approvals processes for diversified economic activities on pastoral land.

DPLH notes that the report explicitly acknowledges the impacts of non-pastoral land uses on rangeland condition, and consequently the need for collaboration between the different parts of Government, pastoralists, third party land users, and Aboriginal people to deliver improved rangeland condition outcomes.

**Department of Primary Industries and Regional Development**

The Department of Primary Industries and Regional Development (DPIRD) acknowledges the findings of the Performance Audit: Management of Pastoral Lands and appreciates the recognition of past performance in this area and recognition of current improvements. DPIRD is committed to processes of continuous improvement in performance and cost-effective management of pastoral lands.

The primary responsibility for DPIRD in the management of pastoral lands, is in the administration of the Soil and Land Conservation Act and in providing advice to the agency responsible for administrating the Land Administration Act.

With respect to the recommendation regarding pastoral lease level monitoring (Recommendation 3a), this will require development of new approaches incorporating remote sensing and ground monitoring. This needs a significant research and development component, including the establishment of ground monitoring sites for calibration and validation of any operational system.

This is new work that will require significant additional resources as the existing monitoring system will need to be maintained while new systems are developed and made operational.

The preparation of policies and guidelines on degradation prevention and good practice management techniques (Recommendation 3b and c) is a shared responsibility. Not-for-profit groups such as Rangelands NRM, Territory NRM and other private entities provide information to assist pastoralists to better manage the rangeland.

With respect to an inter-agency approval process (Recommendation 3d) this government has responded and a more effective cross-government approach has now commenced to facilitate a more streamlined process for permits.