

# Western Australian Auditor General's Report



## Managing the Impact of Plant and Animal Pests: Follow-up



Report 4: 2020-21  
31 August 2020

**Office of the Auditor General  
Western Australia**

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***The Office of the Auditor General acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders both past and present.***

**Managing the Impact of Plant and Animal  
Pests: Follow-up**



**THE PRESIDENT  
LEGISLATIVE COUNCIL**

**THE SPEAKER  
LEGISLATIVE ASSEMBLY**

### **MANAGING THE IMPACT OF PLANT AND ANIMAL PESTS: FOLLOW-UP**

This report has been prepared for submission to Parliament under the provisions of section 25 of the *Auditor General Act 2006*.

Performance audits are an integral part of my Office's overall program of audit and assurance for Parliament. They seek to provide Parliament and the people of WA with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

The objective of the audit was to assess whether State government entities had effectively addressed findings from my Office's 2013 audit *Managing the Impact of Plant and Animal Pests: A State-wide Challenge*.

I wish to acknowledge the entities' staff for their cooperation with this audit.

A handwritten signature in black ink, appearing to read 'C Spencer'.

CAROLINE SPENCER  
AUDITOR GENERAL  
31 August 2020

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## Auditor General's overview

Protecting Western Australia from the threat of invasive plant and animal pests is a challenge. Our State's natural advantages of ocean and desert borders have helped preserve much of our biodiversity and safeguard our agricultural industries. However, tourism and trade activity, which is essential to supporting our standard of living, as well as population growth test these natural advantages. Vast distances also make surveillance and enforcement of biosecurity regulations especially challenging, making productive cooperation with landholders to manage the threat essential.



WA produces nearly one fifth of the nation's agricultural output by value and the South West is an internationally recognised biodiversity hot spot. With this economic value and natural heritage at stake, it is vital that the most serious threats are met with an appropriate and timely response. To do this effectively, entities need good systems to capture and store critical information about pest species, including the size, context and distribution of pest populations, and make it available to landholders so that properly informed risk-based decisions and actions can be taken.

The responsibility for managing the threat of invasive pest species is a shared one, but State government entities are charged with a regulatory role that cannot be delegated entirely. Striking a balance between this role and the need to engage landholders is important as a means of addressing the decline in regulatory activity (monitoring and compliance) we have observed since our last audit. It is also important to ensure that funds raised to assist landholders in managing pests on their lands are put to good use in a timely manner.

# Executive summary

## Introduction

The objective of the audit was to assess whether State government entities (entities) had effectively addressed findings in our 2013 audit *Managing the Impact of Plant and Animal Pests: A State-wide Challenge*.<sup>1</sup>

Our 2013 audit report found it difficult to verify how effectively entities managed established pests. The report made 8 recommendations to the then Department of Agriculture and Food Western Australia that highlighted the need for all stakeholders to collaborate in addressing this complex challenge (Appendix 1).

Since 2013, under Machinery of Government changes, the Department of Agriculture and Food Western Australia has been replaced by the Department of Primary Industries and Regional Development (DPIRD) and the Department of Parks and Wildlife by the Department of Biodiversity, Conservation and Attractions (DBCA). DPIRD and DBCA were the focus of this audit.

## Background

### The challenge

Plant and animal pests damage agriculture, forests, the environment, social amenity and public health, costing Australia billions of dollars annually. In 2018 the annual cost of plant pests (weeds) to Australian agriculture was estimated at between \$4.5 billion and \$6 billion.<sup>2</sup> The cost of animal pests was estimated in 2014 at between \$400 million and \$800 million.<sup>3</sup> With Western Australia (WA) accounting for 18% of agricultural output for Australia in 2018-19, pests pose a significant economic risk to the nation and the State while the livelihoods of producers and communities depend on that production.

In addition to the economic risk to agriculture, pests represent a risk to the biodiversity native to the State. South West Australia alone is an internationally recognised biodiversity hot spot, with about half the roughly 6,000 plant species found nowhere else.<sup>4</sup> This area also features well-known native animals such as the numbat and quokka. Pest animals such as feral cats and foxes eat native animals that have not evolved to deal with such threats. Pest plants may outcompete native plants, particularly threatened species, and endanger their long term survival.

Pest animals and plants can also impact cultural sites, social amenities and human safety. There are increasing reports of feral camels damaging Aboriginal cultural sites, food sources and watering holes in the desert regions of WA and wild dogs are encroaching on regional centres such as Exmouth, endangering human safety. Amazon frogbit, an aquatic weed, has been found in Perth river systems, impacting river health and risking water quality.

### The approach

Managing pests is complex, requiring collaboration among many landholders and other stakeholders with diverse and sometimes competing expectations and interests. These

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<sup>1</sup> [Managing the Impact of Plant and Animal Pests: A State-wide Challenge \(2013\)](#)

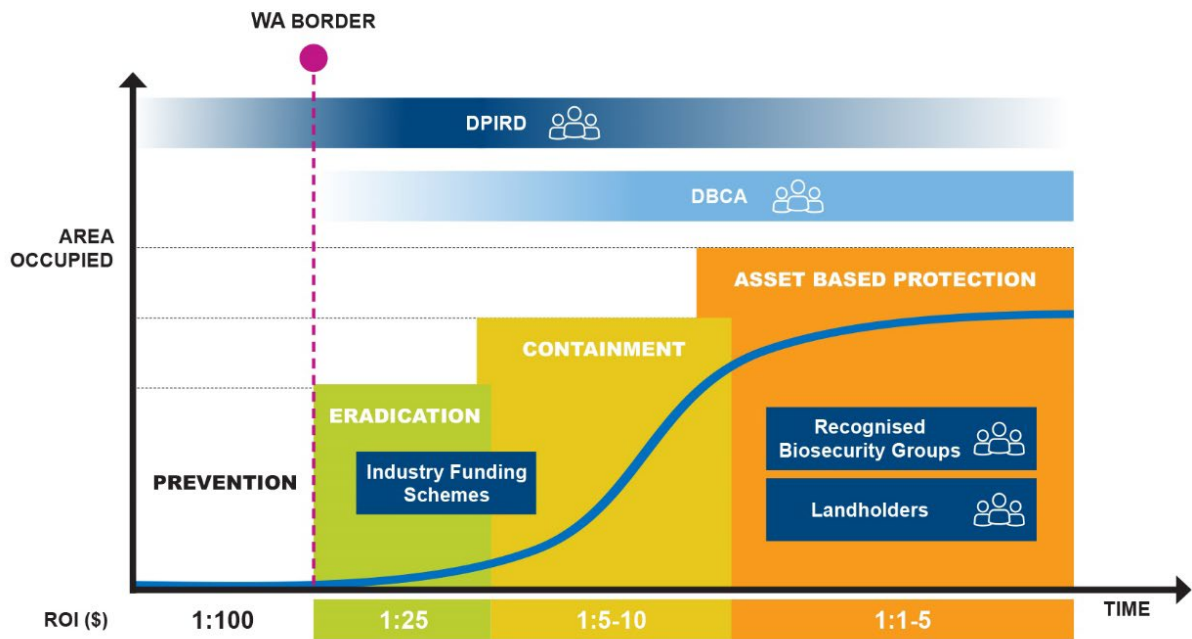
<sup>2</sup> McLeod, R. (2018) Annual Costs of Weeds in Australia. eSYS Development Pty Limited. Published by the Centre for Invasive Species Solutions, Canberra, Australia.

<sup>3</sup> McLeod, R. (2016). Cost of Pest Animals in NSW and Australia, 2013-14. eSYS Development Pty Ltd, 2016. Report prepared for the NSW Natural Resources Commission.

<sup>4</sup> Critical Ecosystem Partnership Fund, 28 July 2020, *Southwest Australia*, accessed 19 August 2020, <https://www.cepf.net/our-work/biodiversity-hotspots/southwest-australia>

include Commonwealth, State and local government entities, Aboriginal communities, miners, primary producers and lifestyle landowners. The sheer size of the State also presents challenges. This requires resources to be targeted to where they can be most effective.

In WA and across Australia, entities use the invasion curve (Figure 1) to guide them in managing pests. This involves preventing pests from entering the State and eradicating new arrivals before they can spread, while containing those already here and limiting their adverse impacts. The idea behind the curve is that it is more cost effective and feasible to stop pests becoming established than to protect assets and the environment when pests are already widespread.



Source: OAG, adapted from the Department of Jobs, Precincts and Regions, Victoria

**Figure 1: Generalised invasion curve for the management of invasive species**

### The legislation

The *Biosecurity and Agriculture Management Act 2007* (BAM Act) and the *Biosecurity and Agriculture Management Regulations 2013* (Regulations) establish the regulatory framework for managing pests in WA. Organisms are classified under the BAM Act and Regulations in categories (Table 1) based on the assessed risk of an adverse impact on other organisms, humans, the environment and agriculture.



	Pests				
	Permitted organism	Permitted organism permit required	Prohibited organism	Declared pest	Unlisted organism
<b>BAM Act and Regulations</b>	S11	R73	S12	S22(2)	S14
<b>Definition</b>	Allowed in WA	Permit required to import	May have an adverse effect on another organism, humans, the environment or agricultural activities	May have an adverse effect on another organism, humans, the environment or agricultural activities	Not defined in category
<b>Where it applies</b>	Whole State	Whole State	Defined areas or whole State	Defined areas or whole State	Not defined
<b>Pest status in WA</b>	May or may not be in WA	Only with a permit	Generally not present or in small numbers in WA	Present in an identified area in WA	May or may not be in WA
<b>No. of plants</b>	47,099	13	870	56	Unknown
<b>No. of animals</b>	1,372	0	843	30	Unknown

Source: OAG

**Table 1: Classification of organisms under the BAM Act**

At 7 June 2020, there were 30 declared vertebrate animal pests and 56 declared plant pests in WA (Appendix 2).

The BAM Act requires landholders to control declared pests on their land. It provides for inspections and pest notices directing landholders to exclude, control or stop keeping declared pests on their property. The BAM Act reinforces these powers with fines of up to \$50,000 for non-compliance.

The BAM Act provides for recognised biosecurity groups (RBGs) as a way for communities to help control established pests. RBGs are legal entities that represent landholders in a defined region and may undertake pest management activities in that region. There are currently 15 RBGs covering about 96% of the State.<sup>5</sup> RBGs are primarily funded by annual rates paid by landholders, known as the Declared Pest Rate, that the State matches dollar for dollar to coordinate and carry out pest control programs. These rates are compulsory although some landholders may apply to have them deferred. The BAM Act requires RBGs to report on their activity to DPIRD and for DPIRD to publish RBG annual reports on their website.

The BAM Act also created the Biosecurity Council to advise the Minister for Agriculture and the Director General DPIRD on biosecurity matters. The Council reports roughly annually, including recommendations to DPIRD to improve processes and address risks.

<sup>5</sup> RBGs do not cover metropolitan Perth, regional centres or parts of the Wheatbelt, South West and Great Southern regions, an area totalling 109,000 square kilometres.

## Who is responsible

DPIRD is the lead entity in managing pests, with a long-standing focus on controlling agricultural pests. As well as its responsibilities for biosecurity and regulation under the BAM Act, it also administers the *Fish Resources Management Act 1994*.

DBCA is responsible for protecting biodiversity and environmental assets such as threatened species and conservation reserves and parks from the impact of pests. DBCA is the largest landholder in WA, with responsibility for 29 million hectares of land conservation reserves and parks and 91 million hectares of unallocated Crown land and unmanaged reserves. It administers the *Biodiversity Conservation Act 2016* and has land management responsibilities under the *Conservation and Land Management Act 1984* and the BAM Act.

Although DPIRD is responsible for administering the BAM Act, it is ultimately landholders who are required to control pests on the land they manage. This includes local and State government entities with landholder obligations, including DBCA, the Forest Products Commission, Main Roads, Department of Water and Environmental Regulation and Department of Planning, Lands and Heritage. In this way, the responsibility to control pests is a shared one that crosses property boundaries and all types of landholding.

## Conclusion

State government entities have not effectively addressed all findings from our 2013 audit report, though they have made some progress on 5 of the 8 recommendations. They have established a framework for collaborating on pest management and released a Statewide plan that defines roles and responsibilities. Policies and criteria to declare pests have been approved and the declared pest list reviewed. They are still to fully implement or evaluate key aspects of the framework and plan, improve transparency of the process for declaring pests, and create a program to periodically review the threat of potential and declared pests.

Information on the spread, abundance and impact of high priority pests is still not comprehensive or shared amongst stakeholders, and efforts to manage pests are still not based on a systematic assessment of the risks they pose. These shortcomings make it hard to manage Statewide pest risks, effectively allocate operational resources and enforce legislation.

To help meet its responsibilities and manage the risk to industry, the environment, and people, DPIRD has increasingly relied on recognised biosecurity groups (RBGs), industry-led pest management and community engagement to support voluntary compliance. However, DPIRD has yet to establish comprehensive and systematic monitoring and evaluation arrangements to demonstrate whether this is an effective regulatory approach and to inform future strategies.

## Key findings

### **A Statewide collaborative framework, strategy and plan for pests have been established but gaps remain**

Since our 2013 audit, DPIRD has established a framework for the collaborative management of pests across WA. Entities have developed formal arrangements to collaborate across entity and land boundaries but these are not always effective. Stakeholders remain functionally separate bodies with differing priorities whose pest management efforts do not always align.

## **The Plan has not been fully implemented and so does not address the threat posed by pests**

We found that the Plan is comprehensive but only 13 of its 38 actions have been completed. Entities do not clearly prioritise and periodically review threats according to risk to ensure efficient use of resources. Crucially, DPIRD has not ranked the highest risk pests nor created emergency plans, generic or specific, to deal with prohibited species.

The process for declaring pests is still not transparent to stakeholders despite this being identified as a priority in our 2013 audit. Since then, DPIRD has reduced regulatory activity in favour of voluntary compliance and community engagement. While this shift aligns with the national approach, it carries risks that pest management is not consistently carried out or enforced for all landholders.

Consistent with the shift in approach, there has been an increase in the number and funding for RBGs which has increased their capacity to assist landholders to manage established pests. However, DPIRD does not know if they are effective substitutes for enforcement by entities.

## **Information on the spread, abundance and impact of pests is still fragmented and inadequate**

DPIRD cannot demonstrate that information on the spread, abundance and impact of high priority pests is accurate and current. Information on individual pests is still fragmented and inadequate to plan effective management programs and measure their success. This means entities do not have an overview of pest populations and their impact to provide a sound basis for resourcing decisions.

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## Recommendations

1. To strengthen the pest management framework, the Department of Primary Industries and Regional Development (DPIRD) should:
  - a. address outstanding Biosecurity Council recommendations and review how they are tracked for completion
  - b. develop an evaluation framework and performance indicators for pest management programs, including for recognised biosecurity groups (RBGs)
  - c. evaluate the Invasive Species Plan and develop a replacement in consultation with relevant stakeholders.

**DPIRD response:** Supported

**Implementation timeframe:** September 2021

2. To improve emergency response planning, DPIRD should:
  - a. use a risk assessment to identify which species require emergency response plans and develop them in consultation with stakeholders
  - b. consider the use of exemplar or generic emergency response plans that can be easily applied to a number of species.

**DPIRD response:** Supported

The Department will focus on developing exemplar emergency response plans that can be used for future responses, rather than creating many plans for species that may not ever enter WA.

**Implementation timeframe:** December 2021

3. To improve the process to declare pests, DPIRD should:
  - a. review and approve the policy and process for declaring pests
  - b. publish the policy on its website and ensure decision making is transparent and documented.

**DPIRD response:** Supported

**Implementation timeframe:** December 2020

4. DPIRD should schedule regular reviews of the declared pest list to ensure it is accurate and up to date.

**DPIRD response:** Supported

A schedule of regular review is supported, and a process for review could be developed by December 2020. Significant developments may trigger earlier review of individual species.

**Implementation timeframe:** December 2020

5. To enhance the completeness, timeliness and accuracy of pest management data, DPIRD and DBCA should:
  - a. develop cross-entity agreements that define how and what data is to be shared

- b. create integrated data sets where possible and appropriate
- c. engage and share data with landholders.

**DPIRD response:** Supported

**DBCA response:** Supported

**Implementation timeframe:** December 2021

6. To improve reporting from the RBGs, DPIRD should:
- a. review reporting requirements to improve the quality, timeliness and simplicity of reporting
  - b. publish RBGs' annual reports, which include the audited financial statement, on the DPIRD website
  - c. consider measures to increase RBGs' compliance with reporting requirements.

**DPIRD response:** Supported

RBG annual reports are published on the DPIRD website as required under the BAM Act.

DPIRD encourages RBGs to develop and publish monitoring and evaluation reports, as well as Operational Plans, and will consider further measures to improve this.

**Implementation timeframe:** December 2020

7. DPIRD should finalise policies for enforcing compliance with regulations and evaluate its approach to ensure objectives of the *Biosecurity and Agriculture Management Act 2007* are being met.

**DPIRD response:** Supported

**Implementation timeframe:** June 2021

## **Response from the Department of Biodiversity, Conservation and Attractions**

The Department of Biodiversity, Conservation and Attractions is responsible for conserving WA's biodiversity, managing approximately 29 million hectares of national parks, State forest and other reserves, and managing the sustainable use and promoting enjoyment of natural areas and wildlife. We also have responsibilities to manage pests on approximately 91 million hectares of unallocated Crown land and unmanaged reserves outside of metropolitan areas and townsites.

We undertake this challenge within existing resources. Management and control of pest species is prioritised to protect native plants and animals, particularly threatened species, enhance national parks and other reserves to enrich visitor enjoyment and experiences, and support good relations with our neighbours.

We acknowledge the findings of the audit and will continue to work with the Department of Primary Industries and Regional Development to improve pest management in WA.

## **Response from the Department of Primary Industries and Regional Development**

In 2007, the Biosecurity and Agriculture Management Act (BAM Act) was enacted, followed by the Biosecurity and Agriculture Management Regulations in 2013. This was part of a transition of the management of biosecurity in WA to a model of true shared responsibility across industry, governments and community. In particular, there has been a significant change in the management and control of widespread and established plant and animal pests in the State, focusing on the development of a community coordinated approach for these pests, and an emphasis on education, engagement and voluntary compliance.

This change was made taking into account current science and policy, and recognising that government resources are best focussed on the prevention and eradication of pests not yet established in the State, rather than the operational management of widespread pests that should be controlled at a local level. Furthermore, it provided a mechanism to empower communities to target and manage the widespread and established pests of most concern to them, and support the responsibilities of landholders under the BAM Act to control those pests through a community approach.

The development and increase of recognised biosecurity groups as the preferred community coordinated approach to manage established and widespread declared pests has enabled us to reprioritise resources to minimise the new and emerging pest and weed threats coming to WA, and provide the best possible public good outcomes.

It is important also to recognise that the capacity of the Department to provide these services is impacted by the occurrence of new and emerging biosecurity threats and priorities, including responses to biosecurity incidents and incursions. Future planning must ensure that these critical services can be maintained throughout these times.

Whilst much work has been done in this transition, there is much still to do. We recognise and acknowledge that it must continue to work with stakeholders to strengthen the system for managing these pests, and minimise the impact on our industries, communities, social amenity and environment. The findings of this report will be an important part of this work.

## Audit focus and scope

This performance audit followed-up our 2013 audit *Managing the Impact of Plant and Animal Pests: A State-wide Challenge*. The objective of the audit was to assess whether State government entities (entities) had effectively addressed the findings from our 2013 report.

In conducting this audit, we:

- reviewed legislation, strategies, policies, procedures and other key documents
- interviewed key staff from the Department of Primary Industries and Regional Development (DPIRD) and the Department of Biodiversity, Conservation and Attractions (DBCA), and members of recognised biosecurity groups (RBGs) and the Biosecurity Council
- reviewed minutes from the Biosecurity Senior Officers Group meetings
- analysed relevant data from entity systems.

The audit focused on the management of invasive species of land based plants and animals. Plant and animal diseases, invertebrate animals such as insects, microorganisms and aquatic and marine pests were out of scope.

This was a performance audit, conducted under Section 18 of the *Auditor General Act 2006*, in accordance with Australian Standard on Assurance Engagements ASAE 3500 *Performance Engagements*. We complied with the independence and other ethical requirements related to assurance engagements. Performance audits focus primarily on the effective management and operations of entity programs and activities. The approximate cost of undertaking the audit and reporting was \$363,000.

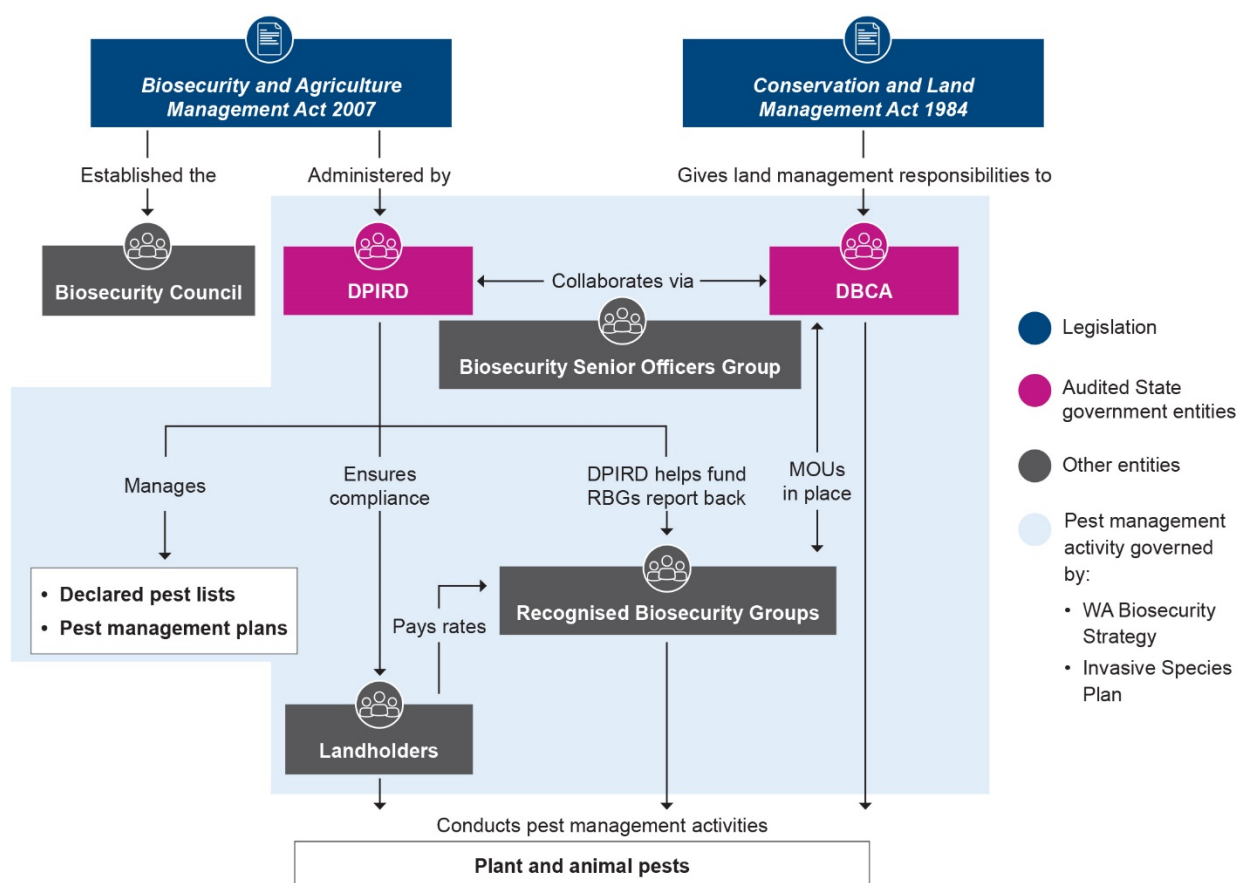
## Audit findings

### A Statewide collaborative framework, strategy and plan for pests have been established but gaps remain

Since our 2013 audit, DPIRD has established a framework (Figure 2) for the collaborative management of pests across the State. In consultation with relevant entities it released 2 documents that provide the strategic focus of entities' efforts to manage pests, define the roles and responsibilities and set out actions to achieve the aims of the strategy. These are:

- the WA Biosecurity Strategy<sup>6</sup> (Strategy) in November 2016
- the Invasive Species Plan<sup>7</sup> (Plan) in February 2015.

In November 2016, DPIRD approved policies that define when to declare an organism a pest under the BAM Act. By establishing the framework, defining the roles of entities and the criteria to declare a pest, DPIRD has made progress with 2 of the recommendations from our 2013 audit while helping to ensure pests are properly identified and resources are well targeted.



Source: OAG

Figure 2: Pest management framework

<sup>6</sup> [WA Biosecurity Strategy 2016-2025](#)

<sup>7</sup> [Invasive Species Plan for Western Australia 2015-2019](#)



## **State government entities have developed formal arrangements to collaborate across entity and land boundaries but these are not always effective**

Entities formalised the Biosecurity Senior Officer's Group (BSOG) in 2016 as the main forum where they can collaborate and decide how to best integrate their collective resources to implement the Plan and Strategy. The BSOG includes senior officers from relevant entities who share information, discuss issues and coordinate actions. The entities that make up the BSOG are:

- DPIRD
- DBCA
- Forest Products Commission
- Department of the Premier and Cabinet
- Department of Water and Environmental Regulation
- Department of Health
- WA Local Government Association
- Department of Defence (Commonwealth).

By collaborating and exchanging information at BSOG meetings, the participants increase their knowledge of current issues and better coordinate their approaches to managing pests.

DBCA has used memorandums of understanding (MOUs) and developed policy to support collaboration with RBGs to manage pests across boundaries between private land and lands managed by DBCA. In 2018-19, DBCA had MOUs with:

- Blackwood Biosecurity to manage feral cats, deer, foxes, pigs and rabbits
- Goldfields-Nullarbor-Rangelands Biosecurity Association for wild dogs
- Northern Biosecurity Group for wild dogs
- Wheatbelt Biosecurity Association for wild dogs.

DBCA has also updated its Good Neighbour Guideline and policy to assist relations with its neighbours. Neighbours include any individual or entity, including local, State and Commonwealth government entities that own, occupy or manage lands adjacent to lands managed by DBCA. This collaboration framework enables RBGs to reduce the risk and damage to agriculture and the environment from pests on State managed land.

Despite arrangements to collaborate, stakeholders remain functionally separate bodies with differing priorities whose pest management efforts do not always align. We found that DPIRD is primarily focused on protecting agriculture at a State level and DBCA on protecting biodiversity, while industry and RBGs tend to focus on the pests that threaten their core businesses. For example, we found that DBCA baiting for foxes and feral cats can pose a risk to working dogs on neighbouring farms if they breach fence lines, while the livestock and working dogs from these farms could adversely impact biodiversity and management programs if they are not kept on their properties.

This leads entities, industry and community stakeholders to set priorities, allocate funds and work in partnership based on individual concerns rather than a collective responsibility for the public interest. It is then hard to effectively collaborate and coordinate pest management.

## **The Plan has not been fully implemented and so does not address the threat posed by pests**

We found that the Plan is comprehensive but only 13 of its 38 actions have been completed. Actions stalled when staff availability and priorities were diverted by organisational restructures and to deal with emergencies such as the recent discovery of Red Imported Fire Ants in Fremantle and Queensland fruit fly in the western suburbs of Perth. DPIRD failed to develop an implementation plan and therefore actions were not prioritised based on risk or scheduled for completion. Only partially implementing the Plan meant findings from our 2013 report have not been fully addressed.

The Plan also required DPIRD to prepare for the eradication, management or emergency response to specific pests based on a risk assessment. We found that:

- DPIRD had not performed risk assessments to identify which species needed a plan
- no emergency plans were developed for the 13 prohibited species identified in the Plan, although 1 had an eradication plan and another had a more general response plan
- of the 28 species listed as requiring eradication, half had a plan developed but only 5 of those are now current and approved
- of the 57 species listed as requiring management control, only 5 have an approved plan or strategy (wild dogs, feral pigs, camels, horses and donkeys).

Other incomplete actions include:

- assessing risk and allocating resources accordingly, and estimating future resource needs
- identifying pest surveillance gaps, and formalising agreements to share data
- creating a framework to monitor and evaluate programs.

Without implementing actions from the Plan:

- stakeholders are less likely to understand their role
- activity will be less coordinated
- measures of success will not be established.

The Plan expired in 2019 and entities have not begun work on the replacement that is needed to ensure Statewide risks of pests are managed. We found the Plan was due for review in 2017 and was to be evaluated in 2018 but neither of these occurred. While this does not stop entities pursuing actions set out in the Plan, it risks public and stakeholder perceptions that these actions are no longer occurring and no longer required. It also creates a risk that the roles and responsibilities of stakeholders will change over time and become unclear.

## **Entities do not clearly prioritise and periodically review threats according to risk to ensure efficient use of resources**

Managing pests effectively requires good, up-to-date information, risk assessment and prioritisation because pest populations can change rapidly if they are not controlled or become established in new locations. We found that entities do not clearly prioritise threats based on current risk assessments and do not review the risk of all pests to agriculture and

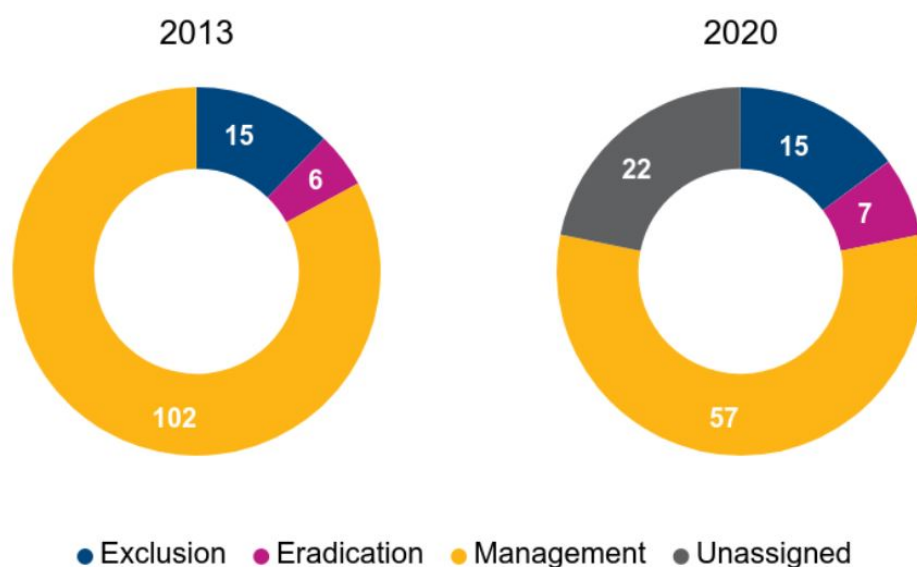
biodiversity regularly enough. This means they still cannot demonstrate that they use resources effectively to control pests in WA.

DPIRD does not have a schedule to periodically review the threat posed by all pests to ensure threat assessments are up-to-date, nor a policy for how often this should occur. The Biosecurity Council recommended review at least every 5 years.<sup>8</sup> This means all species should be reviewed by 2021, but there is no plan to do so. We found:

- DPIRD reviewed 81% of declared pest plants and animals once in 2016
- the Plan intended for DPIRD to review the list of declared pests again 2 years later but this did not occur.

Lack of regular review means the State does not have up-to-date information on the impact and threat from declared pests on which to assess risk and base funding.

Not all declared pests are required to be controlled. The 2016 review created the no control category for pests that DPIRD determined pose a minimal risk to agriculture. DPIRD now refers to this category as unassigned control as these pests may be managed by RBGs or other entities to protect local concerns, the environment or society. Pests in this category require no control action from landholders but RBGs can raise funds through the Declared Pest Rate to manage them if they choose to. Our analysis noted there are currently 22 pest animals and plants in this category (Figure 3). The status of pests in this category was to be reviewed within 2 years but this has not happened. DPIRD advised us that this category is currently under review.



Source: OAG charts based on DPIRD data

**Figure 3: The number of declared pest animals and plants by control category in 2013 (first audit) and 2020 (follow-up audit)**

The feral cat is an example of a declared pest in the unassigned control category. It has been declared because it kills large numbers of native animals but has a negligible impact on agriculture (refer case study below). This means that funds can be raised to manage the pest even though DPIRD considers that control measures should not be enforced.

<sup>8</sup> Advice provided to the Minister on 18 December 2014 regarding the declaration of weeds and vertebrates under section 22 of the *BAM Act*

### Case study – Feral cats declared in 2019

Cats (*Felis catus*) were introduced to Australia during European settlement and are now established across the country, including WA. Feral cats are defined as cats that are living and reproducing in the wild. They are not owned or socialised and survive on their own in the wild by hunting.

Feral cats were declared a pest in 2019. They are in the unassigned category of management, meaning landholders are not required to actively manage them as they have a negligible impact on agriculture. However, they are not completely without risk to agriculture, as feral cats can carry infectious diseases which may be transmitted to domestic livestock. Humans are also at risk from these infectious diseases.

They were declared a pest because, there was considerable current and planned activities undertaken by community groups, industry and government (DBCA), across the State, to limit the impact of feral cats to biodiversity.



Source: Wikipedia

One estimate put feral cats' environmental impact at \$144 million per year based on the number of birds killed.<sup>9</sup> According to DBCA, feral cats have played a major role in the extinction of at least 27 native mammal species. In WA, 36 mammal, 22 bird and 11 reptile species are vulnerable to predation by feral cats.

DBCA conducts baiting and trapping through the Western Shield program to reduce feral cat numbers on land it manages. DBCA also uses fencing and offshore islands to create environments free of feral cats to encourage native wildlife to recover.

DPIRD has developed a policy statement to minimise the risks of harm to domestic cats from the declaration of feral cats as declared pests.

### DPIRD has not ranked the highest risk pests nor created emergency plans for prohibited species

DPIRD has not identified which pests should be its highest priority. DPIRD began ranking the top 15 plant and animal pests in WA in 2015 to provide more focused guidance on resource allocations of the invasive species program. However, we found the process was incomplete and not reviewed. We found 2 plant species prioritised in error and the ranking of animals by economic impact was not completed as intended. DPIRD cannot demonstrate why 1 pest should be ranked above another and that resources are used effectively.

<sup>9</sup> McLeod, R. (2004) Counting the Cost: Impact of Invasive Animals in Australia 2004. Cooperative Research Centre for Pest Animal Control. Canberra

We found little evidence that resource decisions by DPIRD or DBCA are systematically informed by impact assessments of high risk pests and the costs and benefits of treating them. The Plan required DPIRD and DBCA to use an assessment of risk to allocate resources. This partly addressed a Biosecurity Council finding in 2016 that DPIRD's use of risk to prioritise activities would benefit from greater rigour, transparency and consistency. Not carrying out a risk assessment means that entities do not know if funds are used in areas of greatest need or to greatest effect.

DPIRD has not developed emergency plans for the highest risk prohibited species based on impact and the likelihood they would be found here. The Plan identified species that might need emergency plans, but none were developed. We also found no generic emergency plans have been developed and tested. The Biosecurity Council recommended to do this and target resources to plans that could apply to more than 1 species. DPIRD has only recently begun to progress this type of approach but told us it has access to emergency response plans from other jurisdictions. Clear planning for emergencies provides the best chance to avoid pests becoming established while not doing so could reduce the State's overall biosecurity.

Entities' experience with emergency response provides some assurance that emergencies can be managed. While no emergency plans were developed, DPIRD has wide experience actively responding to pest emergencies such as the discovery of Red Imported Fire Ants at Fremantle Harbour. DPIRD has also developed an approved State Hazard Plan for Animal and Plant Biosecurity that defines the roles and responsibilities for preparedness, but only at a high level. It is likely these experiences are widely applicable.

DPIRD told us that responding to emergencies diverts significant resources away from planned plant and animal pest activity. From December 2019 to May 2020, DPIRD estimates these emergency responses occupied over 330 Invasive Species and Environmental Biosecurity staff days. In February 2018 the Biosecurity Council recommended that a dedicated fund be created to deal with emergency responses and help minimise the impact on DPIRD's normal operations. Without better emergency management, resources will continue to be diverted away from technical and regulatory activities towards incident response.

### **The process for declaring pests is still not transparent to stakeholders despite this being identified as a priority in 2013**

DPIRD has largely followed its policy and criteria to declare pests but some decisions are not documented. Our review of the 4 pests (feral cats and 3 plant species) declared since the policy was approved in November 2016 found that DPIRD had not documented the reasons for declaring 2 of the plant species. Failure to document decisions reduces accountability for decision making and the integrity of the State's pest management framework.

DPIRD only assesses requests to declare plants and animals that meet the policy criteria. However, the policy and criteria are not publicly available. DPIRD told us that it regularly receives requests that are incomplete or poorly reasoned. We found that DPIRD did not record its reasons for not assessing these requests. Assessment of incomplete and poorly reasoned requests can waste departmental resources and the lack of transparency and accountability for decisions can erode community trust.

### **DPIRD has reduced regulatory enforcement in favour of voluntary compliance and community engagement, but this carries risks**

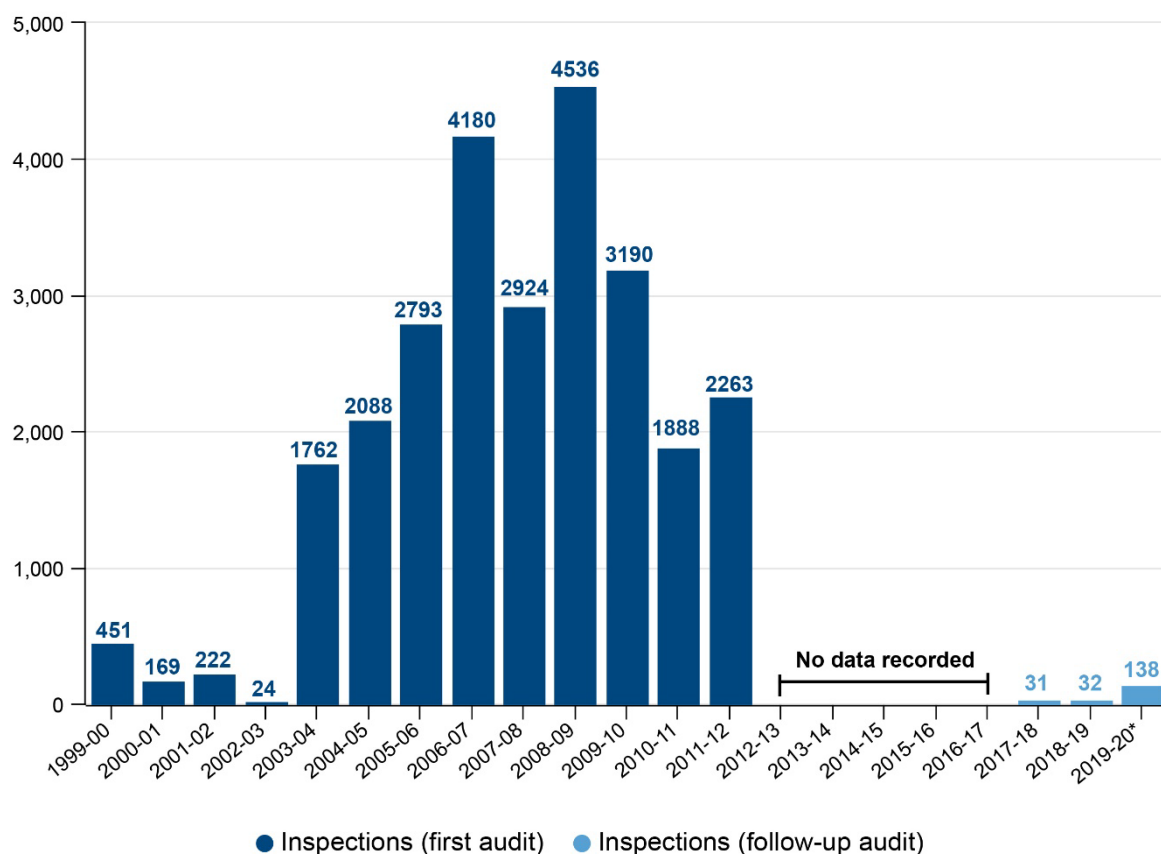
Since our last audit, DPIRD has continued to move further away from a risk-based compliance and enforcement model in managing widespread and established pests. This aligns with the agreed national framework for pest management. The Department of Agriculture and Food Western Australia responded to our 2013 audit that its role was



regulatory and attributed reduced compliance activity to reduced staff numbers. While it is difficult to make a direct comparison in the context of wider organisational changes, we found a 47% increase (from 242.3 to 356.5 full-time equivalent) in DPIRD's Biosecurity and Regulation staffing from 2012-13 to 2018-19, but less compliance activity.

DPIRD's approach now favours engaging with the community through activities such as field days and the Biosecurity Blitz to encourage voluntary compliance. While some enforcement is still carried out, it is significantly reduced since our last audit. If an effective balance between regulatory enforcement and community engagement is not achieved, there is a risk that the emphasis on voluntary compliance will lead some landholders to view pest management less seriously and under-invest in it. DPIRD's policies do not articulate how it will determine this balance and effectively achieve regulatory outcomes.

Our review of DPIRD compliance data found fewer property inspections performed than during our last audit assessment. Available data shows a peak in 2008-09 of 4,536 inspections but only 138 in the first 5 months of 2019 (Figure 4). Instead of conducting inspections, DPIRD has relied on landholders to identify infestations on their properties. However, this cannot be expected to identify all infestations and without property inspections, pests could become established in new locations.



Source: OAG chart based on DPIRD data

**Figure 4: Property inspections performed between 1999-00 and 2019-20**

**There was no data recorded between 2012-13 and 2016-17**

**\*2019-20 data is only until 28 November 2019**

DPIRD does not consider the relative threat of different pests and enforces compliance only where an active RBG is engaged and vocal on an issue. We reviewed all pest notice data since 2013 and found from December 2014 to November 2019, 90% of pest notices were for narrow leaf cotton bush in the South West where the cotton bush compliance program runs

in partnership with local RBGs. The estimated net cost of the cotton bush compliance program was \$56,629 in 2017-18 and \$57,548 in 2018-19. However, DPIRD considers cotton bush a low priority pest and recommended it be classified as permitted during their 2016 review. There is a risk that compliance activity is not based on pests that pose the greatest risk to the State but on the need to support RBGs.

### **Pest management is not consistently carried out or enforced for all landholders**

Pest management on public land is not enforced as DPIRD does not enforce BAM Act requirements on government entities. DBCA manages the largest land area in the State, with responsibilities for over 120 million hectares, an area larger than the size of Victoria, New South Wales, the Australian Capital Territory and Tasmania combined. DBCA has developed a policy to manage the impact of pests such as feral camels and donkeys (Figure 5) on relations with its neighbours but it performs control measures on only a small amount of the land area it manages. However, DPIRD has not carried out inspections on DBCA land or issued any pest notices as it believes to do so would undermine their relationship and collaboration. Greater oversight of public land may be necessary to maintain widespread commitment to pest management as a shared responsibility and trust in the entities charged with managing and regulating it.

Pest management on non-agricultural lands appears less likely to be carried out or enforced. A 2016 survey jointly commissioned by DPIRD and the Invasive Animals Cooperative Research Centre found that private landholders in the South West Land Division who do not rely on income from their land are less likely to actively manage pests. This research also found that increasing diversity in land uses in rural areas has resulted in greater variation of priorities. Some RBGs believe more enforcement is needed if absentee landholders are to meet their obligations to manage pests.

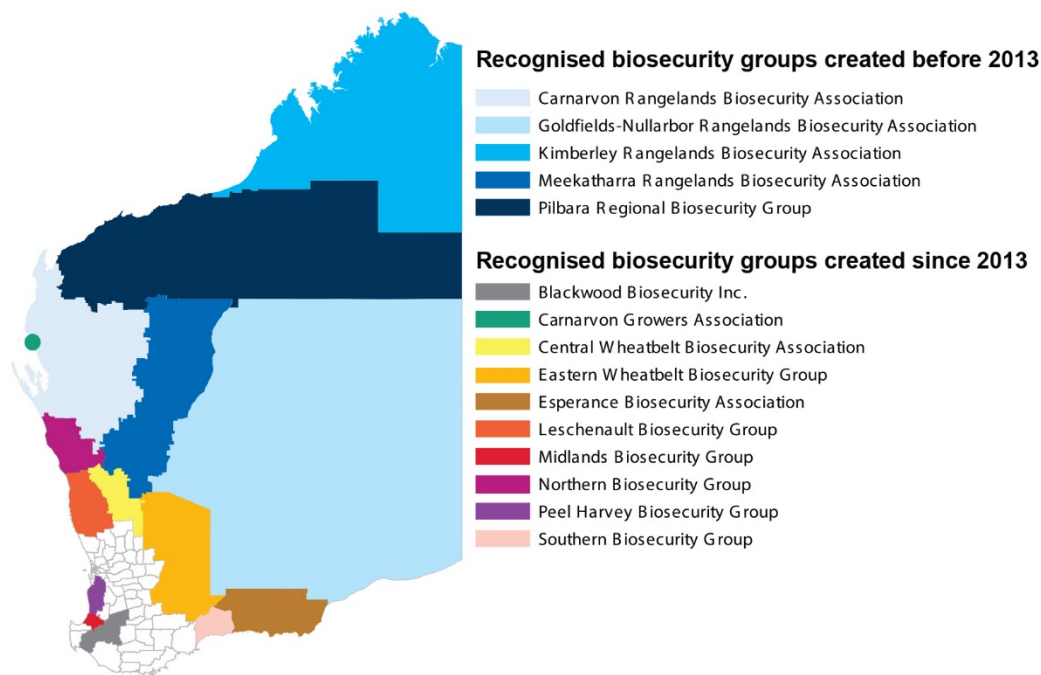


Source: DPIRD

**Figure 5: Feral camels and donkeys cause major damage to infrastructure, vegetation and water sources in North Western and central desert regions of WA**

### **RBGs' capacity to manage established pests has expanded but DPIRD does not know if they are effective substitutes for enforcement by entities**

An increase in the number of RBGs has increased the State's capacity to manage pests but their impact is not being measured and it is not clear how effective they are. The number of RBGs has increased from 5 in 2013 to 15 in 2020 to coordinate the management of existing pests at the regional level. RBGs now cover 96% of WA (Figure 6), but there are still areas of the State they do not cover, including the Great Southern. Further expansion of RBGs into more densely populated and farmed areas in the South West and Wheatbelt could increase protection in areas of high biodiversity. Landholders, industry and other community groups also perform varying degrees of pest management.

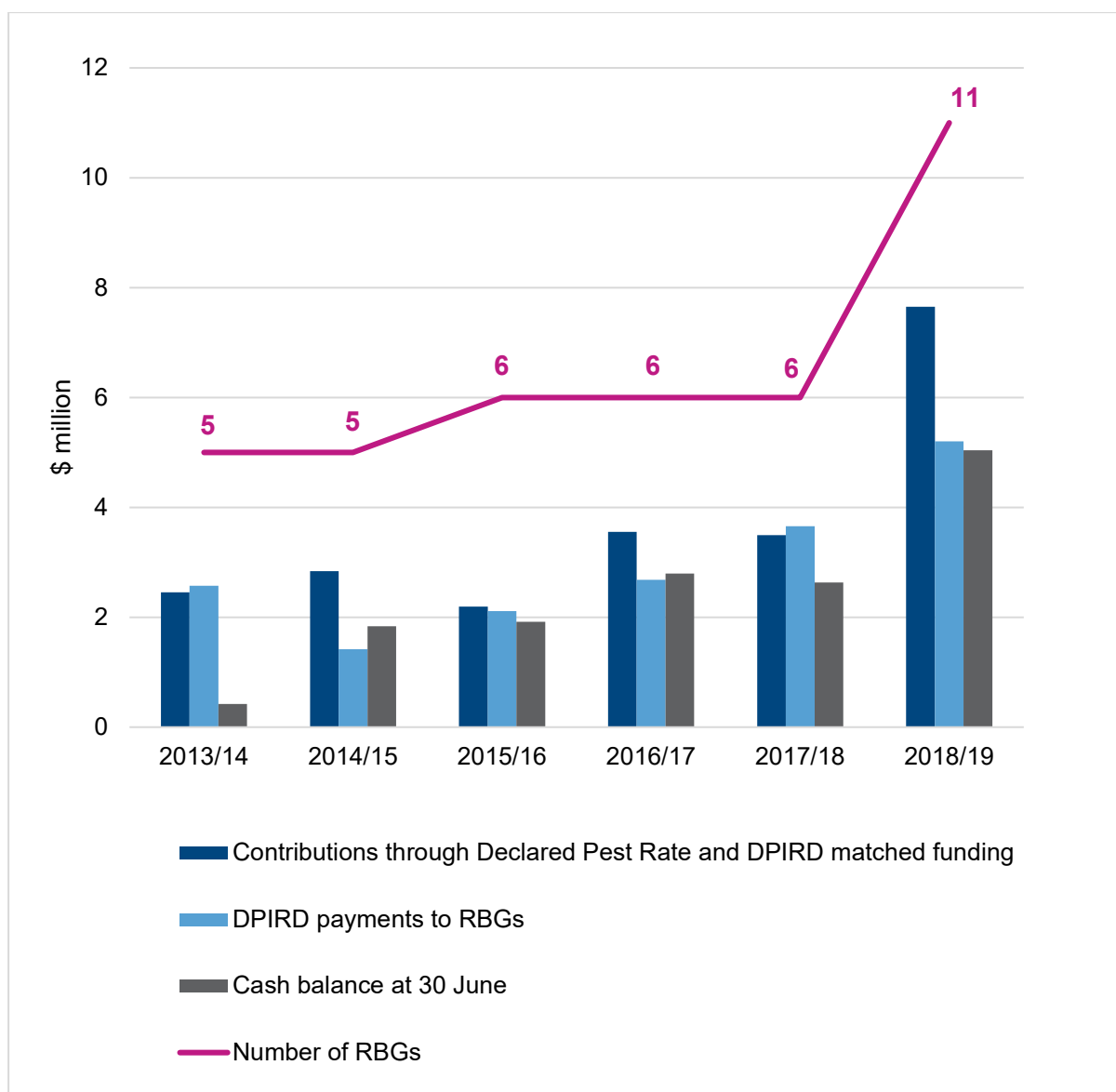


Source: OAG, based on a DPIRD graphic

**Figure 6: Map of WA with RBGs from 2013 to 2020**

RBGs' financial resources have increased, indirectly giving landholders more resources to manage pests and comply with the BAM Act. Between 2013-14 and 2018-19, the State contributed \$11 million to the Declared Pest Account, matching the \$11 million paid by landholders through the Declared Pest Rate. This money is held in the account from where it is distributed to RBGs by DPIRD. At 30 June 2019, the balance of the Declared Pest Account was \$5 million, up from \$419,000 at 30 June 2014 (Figure 7). RBGs are also able to raise funds through Royalties for Regions, Commonwealth Natural Resource Management funding and DPIRD capacity building grants among others. Reliable funding from the Declared Pest Rate provides certainty and allows the RBGs to maintain a consistent level of activity.





Source: OAG chart based on DPIRD figures

**Figure 7: Declared Pest Account and the number of RBGs funded by financial year**

We expected funds raised through the Declared Pest Rate and matching State contribution to closely track expenditure on RBGs' pest management activities over time. However, funds raised in 2018-19 were far in excess of the amount spent, leaving a substantial cash balance of unspent funds in the Declared Pest Account. While there may be legitimate reasons for the cash balance to fluctuate and increase over time as the number of RBGs increases, the intent should be to use the funds in a timely manner for stated purposes. A growing cash surplus may indicate a need to review this funding mechanism to ensure it is efficient.

DPIRD is currently unable to assess if RBGs provide better or more cost effective outcomes than regulatory enforcement because it has no framework to evaluate them. We found that current reporting by RBGs provides limited information about their success in managing pests and DPIRD has not independently assessed their impact. Guidance provided by DPIRD to RBGs suggests they measure outputs such as baits laid and traps set rather than outcomes such as reductions in pest populations. This is reflected in the RBGs' annual reports we reviewed. Without measuring and reporting outcomes, DPIRD does not know if the RBGs' approach is effective.

We reviewed RBG annual reports from 2014-15 to 2018-19 and found them to be of varying quality and unable to provide a sound performance assessment. In 2018-19, DPIRD paid out \$5.2 million from the Declared Pest Account to 11 RBGs. However, not all RBG annual reports acquitted this expenditure in a timely manner, if at all, and we found not all reports provided sufficient detail to know how funds were spent.

Under the BAM Act, RBGs are required to report to DPIRD on the use of funding from the Declared Pest Account, and provide an audited financial statement by 31 October each year. Our review of 2018-19 RBG annual reports identified the following areas of non-compliance with the BAM Act:

- 8 of the 11 funded RBGs submitted their reports after the 31 October 2019 deadline. As at 21 May 2020, 1 report was still outstanding
- 4 of the 11 funded RBGs did not submit an audited financial statement. Only 2 RBGs included the audited financial statement in their annual report as required. Omitting the financial statement from the annual report greatly limits the transparency of expenditure, especially for rate payers
- only 1 of the 11 RBGs complied with all requirements provided by DPIRD
- at the time of our review, none of the 2018-19 annual reports were available on the DPIRD website as required by s171 of the BAM Act. They subsequently became available on 6 July 2020.

The extent of non-compliance may reflect inadequate guidance and support provided to largely voluntary RBGs by DPIRD. Without timely and accurate reporting by RBGs, DPIRD cannot be sure they offer value for money and effective management of high priority pests over time, and ratepayers will not have visibility of the operations they fund.

## **Information on the spread, abundance and impact of pests is still fragmented and inadequate**

Despite this being 1 of our main findings in the 2013 audit, DPIRD cannot demonstrate that information on the spread, abundance and impact of high priority pests is accurate and current. Information on individual pests is still fragmented and inadequate to plan effective management programs and measure their success. This means entities do not have an overview of pest populations and their impact to provide a sound basis for resourcing decisions.

Information recorded by DPIRD, DBCA, RBGs and other stakeholders is distributed across many different databases and locations and sharing arrangements have been informal and ad hoc. For example, monitoring cameras (Figure 8) store images of pest animals in many locations around the State. These images and the time and location data attached to them are not collected in a single searchable database.



Source: DBCA

**Figure 8: Image from monitoring camera at Lowlands on the DBCA managed estate**

The State's pest management strategy includes sharing resources and knowledge, but we found little evidence that this was happening in a comprehensive or systematic way. Without systematic knowledge sharing it is hard for entities to develop a comprehensive, shared understanding of pest threats, increasing the risk that programs will not work together effectively.

State level monitoring and reporting of progress and outcomes from pest management programs is generally limited and not performed consistently or in a timely manner. Entities monitor, evaluate and report on some of their pest management programs, examples of this are:

- DBCA's Western Shield program reports regularly. It has a monitoring plan and its performance is regularly evaluated.
- DBCA also reports on its use of the Forest Enhancement Fund and the Wet Season Weed Program.
- DBCA reported on implementation of the *Cane toad strategy for Western Australia 2009 – 2014* but has not done so yet for the replacement strategy for 2014 – 2019.
- DPIRD monitors farmer and pastoralist attitudes to the State Barrier Fence annually but a lack of clear performance measures makes it hard to assess its effectiveness.

Other data capture and monitoring information remains in regional databases and is not collated or reported regularly, or at all. This limits the quality and timeliness of management

information at a corporate level and limits the ability of entities and their responsible ministers to be accountable to Parliament for the cost of programs.

DPIRD and DBCA have begun to use customised software to improve data capture and evaluation but these do not yet substantially add to existing information about WA pest animals and plants. Since our last audit:

- DBCA in 2017 developed the Weed App, a data collection application that includes a mapping function for field officers to record the location of weeds and the treatment (Figure 9). The app is intended to evidence the effectiveness of weed control measures over time and enhance current reporting capabilities.
- DPIRD in 2018 released a similar application for priority pests and projects using the same location mapping software but with enhanced reporting functions. It is largely used for documenting pests and control measures in the eradication and exclusion categories.
- DPIRD in 2014 developed the MyPestGuide family of applications for public use that includes the Reporter application which allows anyone to record sightings of pests. From 1 January to 31 December 2019 there were a total of 106,718 observations submitted through MyPestGuide. Some RBGs also use the application for weed surveillance.

These applications represent a significant shift forward in the use of technology and the availability of information. However, until they are more widely used, they are unlikely to help create an accurate, current or complete record of priority pests.













Source: DBCA

**Figure 9: Mapping (bright blue) of large infestations of grader grass in the Miluwindi Conservation Park using the DBCA Weed App**

Lack of data also makes it hard to assess if RBGs are effective at controlling pests. RBGs told us they would appreciate better baseline, monitoring and surveillance data to evaluate their programs and assess if pest management activities are successful over time. Some RBGs use the surveillance application FeralScan to log pest animals, the use of which is also encouraged within DBCA. This information is often shared by RBGs at a regional level in private groups with DBCA and DPIRD. But the information is not aggregated at a State level, and some landholders do not contribute surveillance through fear of non-compliance. Without substantial and reliable data, the effectiveness of RBGs' and entities' pest management will remain hard to assess.

## Appendix 1: Recommendations made in our 2013 audit report

Report recommendations: the Department of Agriculture and Food, Western Australia (now Department of Primary Industries and Regional Development) should:	Current status	Traffic lights
<ul style="list-style-type: none"> <li>ensure that an effective framework for the collaborative management of pests across the State is established; and that key roles of government agencies are defined</li> </ul>	Implemented	
<ul style="list-style-type: none"> <li>develop a Statewide plan for the management of all declared pests</li> </ul>	Partly implemented	
<ul style="list-style-type: none"> <li>ensure that information on the spread, abundance and impact of high priority pests is accurate, current and complete</li> </ul>	Not implemented	
<ul style="list-style-type: none"> <li>approve its draft policies and criteria to declare pests; and establish a transparent process that is visible to external stakeholders</li> </ul>	Partly implemented	
<ul style="list-style-type: none"> <li>establish a program under which the threat posed by potential and declared pests is subject to periodic documented review</li> </ul>	Partly implemented	
<ul style="list-style-type: none"> <li>develop effective prioritisation processes that ensure its operational resources are directed to combating the highest threats</li> </ul>	Partly implemented	
<ul style="list-style-type: none"> <li>develop an effective monitoring and evaluation regime to determine whether planned operational outcomes are being achieved</li> </ul>	Not implemented	
<ul style="list-style-type: none"> <li>where appropriate, make greater use of enforcement mechanisms under the BAM Act to ensure landholders meet their responsibilities to control pests on their land.</li> </ul>	Not implemented	

Source: OAG

## Appendix 2: Declared pest list

	Vertebrate animals and plants	Common name	Scientific name
1	Animal	Red Fox	<i>Vulpes vulpes</i>
2	Animal	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>
3	Animal	Wild boar, feral pig	<i>Sus scrofa</i> (feral)
4	Animal	Flowerpot Snake, Brahminy blindsnake, Bootlace Snake	<i>Ramphotyphlops braminus</i>
5	Animal	ring-necked pheasant, Common pheasant	<i>Phasianus colchicus</i>
6	Animal	Paddy Finch, Java Sparrow	<i>Padda oryzivora</i>
7	Animal	Wild rabbit with wild-type brown colouring, not domestic or fancy breeds or commercial breed, European Rabbit	<i>Oryctolagus cuniculus</i> (feral)
8	Animal	Domestic Rabbit, Domestic / Fancy breeds or commercial breed, not wild-type rabbit with brown colouring.	<i>Oryctolagus cuniculus</i> (domestic)
9	Animal	Ferret, Domestic Ferret	<i>Mustela putorius furo</i> (domestic)
10	Animal	Agile Wallaby	<i>Macropus agilis</i>
11	Animal	Common House Gecko, Bridled House Gecko	<i>Hemidactylus frenatus</i>
12	Animal	Northern Palm Squirrel	<i>Funambulus pennantii</i>
13	Animal	Feral cat	<i>Felis catus</i> (feral)
14	Animal	Feral horse	<i>Equus caballus</i> (feral)
15	Animal	Feral donkey	<i>Equus asinus</i> (feral)
16	Animal	Galah	<i>Eolophus roseicapilla</i>
17	Animal	Emu	<i>Dromaius novaehollandiae</i>
18	Animal	Fallow deer	<i>Dama dama</i>
19	Animal	Wapiti, Red deer, Elk	<i>Cervus elaphus</i>
20	Animal	Feral goat	<i>Capra hircus</i> (feral)
21	Animal	Wild dog hybrids, Wild dog / Dingo / Feral dog	<i>Canis familiaris</i>
22	Animal	Feral camel, Dromedary camel (feral)	<i>Camelus dromedarius</i> (feral)
23	Animal	Little Corella (Pilbara-Murchison and northern wheatbelt subspecies)	<i>Cacatua sanguinea westralensis</i>
24	Animal	Little Corella (Kimberley subspecies)	<i>Cacatua sanguinea sanguinea</i>
25	Animal	Western Corella (Lake Muir subspecies), Muir's Corella	<i>Cacatua pastinator pastinator</i>
26	Animal	Western Corella (northern and central wheatbelt subspecies), Butler's corella	<i>Cacatua pastinator butleri</i>
27	Animal	Sulphur-crested Cockatoo	<i>Cacatua galerita</i>

	Vertebrate animals and plants	Common name	Scientific name
28	Animal	Banteng Cattle	<i>Bos javanicus</i>
29	Animal	Beefalo cattle breed and all animals of 37.5% and more American bison genetic material	<i>Bison bison</i> x <i>Bos taurus</i> (more than 37.5%)
30	Animal	But excluding Beefalo Cattle and all animals of 37.5% and less Bison genetic material), American Bison (Including Hybrids Thereof	<i>Bison bison</i>
31	Plant	saucunazi, macaniqueira, m'sau, Indian jujube, Chinese apple	<i>Ziziphus mauritiana</i> lam.
32	Plant	calla lily, arum lily	<i>Zantedeschia aethiopica</i> (l.) spreng.
33	Plant	sheepbur, sea burdock, rough cocklebur, kra chap, karheasappiruoho, kankerroos, hedgehog burweed, heartleaf cocklebur, ditchbur, common cocklebur, cocklebur, clotbur, buttonbur, burweed, abrojillo, noogoora burr, Bathurst burr	<i>Xanthium strumarium</i> l.
34	Plant	thorny burweed, spiny cocklebur, spiny clotbur, prickly burweed, piikkisappiruoho, dagger weed, dagger cocklebur, burweed, boetebos, Bathurst burr	<i>Xanthium spinosum</i> l.
35	Plant	gorse, furze	<i>Ulex europaeus</i> l.
36	Plant	oatgrass, kangaroo grass, habana grass, grader grass	<i>Themeda quadrivalvis</i> (l.) kuntze
37	Plant	tamarisk, flowering cypress, athel tree, athel tamarisk, athel pine, athel	<i>Tamarix aphylla</i> (l.) h.karst.
38	Plant	apple of Sodom	<i>Solanum linnaeanum</i> hepper and p.-m.l.jaeger
39	Plant	white horsenettle, silverleaf nightshade	<i>Solanum elaeagnifolium</i> cav.
40	Plant	variegated thistle, milkthistle, blessed milkthistle	<i>Silybum marianum</i> (l.) gaertn.
41	Plant	sicklepod senna, sicklepod, coffeeweed, javabean, chinese senna	<i>Senna obtusifolia</i> (l.) h.s.irwin and barneby
42	Plant	Seven-golden-candlesticks, ringwormshrub, ringwormbush, ringworm senna, empress-candle-plant, emperor's candlesticks, candlestick senna, candle bush, Christmas-candle	<i>Senna alata</i> (l.) roxb.
43	Plant	sagittaria, delta arrowhead	<i>Sagittaria platyphylla</i> (engelm.) j.g.sm.
44	Plant	elmleaf blackberry, Thornfree, Loch Ness, Blacksatin	<i>Rubus ulmifolius</i> schott



	Vertebrate animals and plants	Common name	Scientific name
45	Plant	keriberry, Himalayan blackberry	Rubus rugosus sm.
46	Plant	early blackberry	Rubus laudatus a.berger
47	Plant	Blackberry	Rubus anglocandicans a.newton
48	Plant	mesquite	Prosopis glandulosa torr. x Prosopis velutina wooton
49	Plant	water lettuce	Pistia stratiotes l.
50	Plant	parkinsonia	Parkinsonia aculeata l.
51	Plant	velvet tree pear, velvet pear	Opuntia tomentosa salm-dyck
52	Plant	erect prickly pear, common prickly pear	Opuntia stricta (haw.) haw.
53	Plant	nopal de tortuga, nopal de culebra	Opuntia puberula hort. vindob. ex pfeiff.
54	Plant	plains prickly pear	Opuntia polyacantha haw.
55	Plant	drooping tree pear	Opuntia monacantha haw.
56	Plant	teddy bear cactus, golden bristle cactus, bunny ears	Opuntia microdasys (lehm.) pfeiff.
57	Plant	tuna cactus, sweet pricklypear, spiny pest pear, spineless cactus, prickly pear, mission pricklypear, grootdoringturksvy, Indian fig, Boereturksvy	Opuntia ficus-indica (l.) mill.
58	Plant	Engelmann's prickly pear, Engelmann's pear	Opuntia engelmannii salm-dyck ex engelm.
59	Plant	red-flower prickly pear	Opuntia elatior mill.
60	Plant	Riverina pear	Opuntia elata salm-dyck
61	Plant	stemless thistle	Onopordum acaulon l.
62	Plant	parrot's feather, Brazilian water milfoil	Myriophyllum aquaticum (vell.) verdc.
63	Plant	two-leaf cape tulip	Moraea miniata andrews
64	Plant	one-leaf cape tulip	Moraea flaccida (sweet) steud.
65	Plant	Amazon frogbit	Limnobium laevigatum (humb. & bonpl. ex willd.) heine
66	Plant	wild sage, white sage, red-flowered sage, largeleaf lantana, common lantana	Lantana camara l.
67	Plant	cotton-leaf physic-nut, bellyache bush	Jatropha gossypifolia l.
68	Plant	water pennywort, spaghetti weed, hydrocotyle, grote waternavel, floating marshpennywort	Hydrocotyle ranunculoides l.f.
69	Plant	narrow leaf cotton bush	Gomphocarpus fruticosus (l.) W.t.aiton
70	Plant	stickywilly, false cleavers	Galium spurium l.

Vertebrate animals and plants		Common name	Scientific name
71	Plant	stickywilly, scratch-grass, robin-run-over-the-hedge, goosegrass, common bedstraw, cleavers, catchweed bedstraw, catchweed, bed straw	Galium aparine L.
72	Plant	salvation Jane, Paterson's curse	Echium plantagineum L.
73	Plant	thistle cholla, brown-spined Hudson pear, Hudson pear (brown-spined)	Cylindropuntia tunicata (Lehm.) F.M.Knuth
74	Plant	white-spined Hudson pear, Hudson pear (white-spined)	Cylindropuntia pallida (Rose) F.M.Knuth
75	Plant	candle cholla, Klein's pencil cactus, Klein's cholla	Cylindropuntia kleiniae (DC.) F.M.Knuth
76	Plant	rope pear, devil's rope	Cylindropuntia imbricata (Haw.) F.M.Knuth
77	Plant	coral cactus, boxing glove cactus	Cylindropuntia fulgida (Engelm.) F.M.Knuth
78	Plant	strangle vine, golden dodder, field dodder, dodder, common dodder	Cuscuta campestris Yunck.
79	Plant	rubbervine, Madagascar rubbervine	Cryptostegia madagascariensis Bojer ex Decne.
80	Plant	skeleton weed, rush skeleton weed, naked weed, hogbait, gum succory	Chondrilla juncea L.
81	Plant	rubber bush, calotropis	Calotropis procera (Aiton) W.T.Aiton
82	Plant	neem tree, margosa tree, Indian lilac	Azadirachta indica A. Juss.
83	Plant	Eve's pin, Eve's needle	Austrocylindropuntia subulata (Muehlenpf.) Backeb.
84	Plant	coral cactus, cane cactus	Austrocylindropuntia cylindrica (Juss. ex Lam.) Backeb.
85	Plant	bridal creeper	Asparagus asparagoides (L.) Druce
86	Plant	camelthorn	Alhagi maurorum Medik.

Source: DPIRD

## Auditor General's 2020-21 reports

Number	Title	Date tabled
3	Waste Management – Service Delivery	20 August 2020
2	Opinion on Ministerial Notification – Agriculture Digital Connectivity Report	30 July 2020
1	Working with Children Checks – Managing Compliance	15 July 2020

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