



DRAFT SUBMISSION

# NSW Invasive Species Management Review

OCTOBER 2023





Local Government NSW (LGNSW) is the peak body for local government in NSW, representing NSW general purpose councils and related entities. LGNSW facilitates the development of an effective community-based system of local government in the State.

# OVERVIEW OF THE LOCAL GOVERNMENT SECTOR



Local government in NSW employs **55,000 people**



Local government in NSW is responsible for about **90% of the state's roads and bridges**



Local government in NSW looks after more than **\$177 billion** of community assets



NSW councils manage an estimated **4 million tonnes of waste** each year



Local government in NSW spends more than **\$2.2 billion** each year on caring for the environment



NSW councils own and manage more than **600 museums, galleries, theatres and art centres**



NSW has more than **350 council-run libraries** that attract tens of millions of visits each year



NSW has more than **400 public swimming and ocean pools**

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# Opening

Local Government NSW (LGNSW) is the peak body for local government in NSW, representing all NSW general purpose councils and related entities. LGNSW facilitates the development of an effective community-based system of local government in the State.

LGNSW welcomes the opportunity to make a submission to the NSW Invasive Species Management Review, being undertaken by the Natural Resources Commission (NRC). Local government has a significant role in biosecurity including:

- as a local control authority (LCA) in regulating weeds under the *Biosecurity Act 2015*,
- as a land manager, to implement its biosecurity responsibilities (e.g. weeds, pests)

Local government is supportive of the concepts that underpin the Biosecurity Act, such as risk-based decision making and a tenure neutral approach to invasive species management. The legislation introduced an outcomes-focused framework for the management of invasive pests, weeds and diseases, however the average person in the community can find it difficult to understand what is required of them. This is a significant barrier to the early identification and control of invasive species.

This submission is provided as a draft, pending endorsement by the LGNSW Board at its next meeting. We will advise of any amendments to the submission in due course.

# Background

The NSW Premier requested the NRC review the impacts and risks of invasive species in NSW and the effectiveness of management strategies (under Section 13(1)(d) and (f) of the *Natural Resources Commission Act 2003*).

The purpose of the review is to advise the Minister for Agriculture and the Minister for Environment of strategic opportunities to improve the management of invasive species in NSW across all land tenures for environmental, economic, social and cultural benefits. The NRC's advice may inform future investment decisions, governance arrangements, strategies and management priorities.

The terms of reference for the review provide that the scope includes non-native weeds and terrestrial animals, but does not include native species that have pest like impacts, marine species, diseases, governance arrangements, roles and responsibilities of regulators and public land managers, and national inter-governmental agreements.

# Response

The focus of the NRC's review is on the nature and scale of invasive species in NSW and their impact on the state's economy, environment and communities. However governance frameworks have a strong influence on how effectively NSW is able to manage invasive species. LGNSW has therefore included feedback on governance frameworks in its response below.

## 1. To what extent are the NSW environment, industries and communities currently impacted by invasive species?

Government, industry and community all incur costs to manage invasive species or their impacts. Invasive species are a cost to local economies, whether that be from displacing native species, or changing the natural environment e.g. vegetation or aesthetic changes reducing tourism opportunities, or loss of pollinators and subsequent decline in productivity. Costs to the community includes lost opportunity costs, e.g. inability to use natural areas due to fire ants, loss of amenity from weeds or threats posed by invasives. Environmental impacts include changes to ecosystem services and overall ecology when invasives out-compete native species.

The NSW State of the Environment Report 2021<sup>1</sup> estimates that pest animals cost the NSW economy \$170 million each year in lost production and management costs, while weeds cost the economy \$1.8 billion annually in lost production and management costs. It also notes that the spread of emerging invasive species is getting worse and invasives posed a threat to more than 70% of threatened species and endangered ecological communities.

The national *draft Threat Abatement Plan for predation by feral cats 2023*<sup>2</sup> includes valuable information on the distribution and impact of cats on native wildlife, noting that "predation by cats is a recognised threat to over 200 nationally threatened species, and 37 listed migratory species (of which nine are also listed as threatened". It also notes that "feral cats in Australia kill over 1.5 billion native mammals, birds, reptiles and frogs, and 1.1 billion invertebrates each year".

Other national or NSW strategies and action plans for invasive species such as pigs, foxes and deer also contain valuable information on the estimated extent of those species and their impact.

As a major land manager, the scale of local government's responsibilities for managing invasive species is significant. Councils also have responsibility for regulating weeds, which is partly funded through the Weed Action Program. Some cost recovery from compliance work is also possible, however this often does not reflect the full cost of

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<sup>1</sup> [Invasive Species | NSW State of the Environment](#)

<sup>2</sup> [Threat abatement plan for predation by feral cats 2023 \(storage.googleapis.com\)](#)

this function. An LGNSW survey of NSW councils identified an estimated \$16.6 million in weed management regulatory costs for 2021/22 that could not be recovered through fees and charges.

## **2. To what extent do you think existing programs in NSW are effectively managing invasive species?**

This is a difficult question to answer given there are widespread invasive species that have been subject to control measures for decades, while NSW is also trying to contain or eradicate new invasives/incursions. NSW is also contending with population explosions of several existing invasives due to the boom/bust nature of the natural environment, such as the NSW Government's recent \$13M commitment to feral pig control.

Existing programs appear to be barely maintaining the status quo of some invasive species, but in many cases this control is not effective, with invasive species populations and distribution increasing over time. Some examples are provided below, outlining the challenges and possible reasons for this.

### **Plant invasives**

#### Funding

Weed incursions negatively impact the productivity and yield of agricultural land and can have a profound effect on the sustainability of regional communities. Much of the current weed funding provided is for the management of new and emerging weeds, however there are other persistent problem weeds, such as Fleabane and Silver Leaf Nightshade, that do not fit this criterion. Limited funding is available for the management of weed incursions of species such those above that are widespread, well-established and impact – on an ongoing basis – the productivity of agricultural land and the integrity of natural habitats.

Access to additional funds beyond those available through routine federal state and local avenues are often needed to support programs make in-roads in managing invasive species. For example, bushfire recovery funding was accessed to support programs in the Kempsey/Upper Macleay region for controlling Tropical Soda Apple (TSA) following a spike in distribution after the 2019 bushfires. A key element was a comprehensive control program in riparian zones to eliminate infestations and prevent further spread along the watercourse and to private lands. Additional funding enabled contract weed crews to be engaged. The program also assisted landholders with increased surveillance of private lands to support, educate and motivate affected landholders to have effective TSA programs in place to protect their land and livelihood.

Councils have also noted that the cost of labour and materials continues to rise however funding under the Weed Action Program has remained relatively flat over the last five years (since 2018/19) despite the inflation rate between 2018 and 2022 totalling

12.4% (average 3% per year). There was a reasonable increase in the total allocation between 2016/17 and 2018/19, but minor (<\$200,000) or zero increases since then.

#### Weed Action Program Funding 2010/11 to 2022/23

Year	Regional program allocation (\$)	State program allocation (\$)	Total (\$)
2010/11	7,844,951	924,049	8,769,000
2011/12	8,080,301	1,447,685	9,527,986
2012/13	8,309,585	1,395,408	9,704,993
2013/14	8,379,615	1,528,898	9,908,513
2014/15	8,642,001	1,459,871	10,101,872
2015/16	9,289,119	1,455,880	10,744,999
2016/17	8,510,357	1,473,643	9,984,000
2017/18	10,234,800	1,498,800	11,733,600
2018/19	10,881,800	1,618,200	12,500,000
2019/20	11,046,500	1,616,000	12,662,500
2020/21	11,046,500	1,616,000	12,662,500
2021/22	11,046,500	1,613,500	12,660,000
2022/23	#	#	12,800,000

# figures unavailable

Although councils receive funding to assist with control of numerous invasive priority weeds, it is insufficient to provide advanced control at a landscape scale, with some councils up to 40% underfunded to achieve the required control. For example, Leeton Shire Council receives \$60,000 annually. This limited resourcing notably hampers councils such as Leeton from adequately fulfilling their responsibilities in relation to weed control.

WAP funding is allocated by NSW Treasury to the Department of Primary Industries and then Local Land Services each year. Councils and other members of the regional weed committee must apply to their Local Land Services for funding each year. There can be delays of several months before funding is awarded and/or made available after the start of the financial year. This annual process is time consuming, pits councils against one another and gives no real certainty for councils/local control authorities to enable longer-term planning or programs that are necessary for effectively managing priority weeds. Providing a longer period of funding may also encourage councils and others to engage in additional collaborations to meet regional strategy objectives.

**Recommendation 1:** That the NSW Government provide a contemporary and consistent funding stream to Councils and County Councils for weed control through the Weed Action Program that is:

- a) increased to \$20M per year
- b) indexed to inflation
- c) awarded to LCAs for a (minimum) 3 year horizon to enable forward planning.

**Recommendation 2:** That Weed Action Program administration be revised to minimise duplication and streamline reporting and auditing requirements for councils and county councils.

## Regulations

Local control authorities (LCAs) have expressed concern that Schedule 1 of Biosecurity Order (Permitted Activities) 2019 is not fit for purpose when it comes to priority weeds. For example, Division 5 of the Order sets out the conditions for importing equipment from Queensland to prevent Parthenium weed spread. As required by the Order, grain harvesters and comb trailers are diligently checked at the border through the border inspection program. However, support vehicles such as utilities, field bins and trucks are not subject to checks.

More recent records of Parthenium infestations show that no infestations have resulted from headers but instead have come from grain and hay distributed into NSW particularly during the 2016-2019 drought. This shows that the settings within the Order, particularly with regard to Parthenium, require review to reflect what is occurring on-ground. LCAs have also noted that South Australia and Western Australia require cross-border movements of grain and fodder (for example) to be traceable and permitted. Given the spread of Parthenium into NSW already experienced, the introduction of checks such as these for high-risk pathways in NSW is warranted.

**Recommendation 3:** That the Biosecurity Order (Permitted Activities) 2019 be revised to reflect and address known pathways for weed spread.

## **Invasive animals**

### Feral cats

Feral cat numbers continue to increase despite efforts, such as being listed as a key threatening process under state and federal biodiversity legislation and various projects focusing on feral cat baiting and control.

A significant challenge for managing feral cats is the regulatory framework which assumes there is an obvious distinction between feral cats and domestic cats. However in practice there is often conjecture about whether a cat is feral or stray (ie, domestic) and therefore how it should and can be managed. This situation is further complicated as stray cats may become part of the feral population. Some professionals in this field state they can readily identify a feral cat when brought into care, others say the indicators are not clear cut. The lack of consensus on readily identifying feral cats is a key barrier to their effective management as an invasive species.



Councils have for some time noted that the 'leakage' of pet cats into the feral population is a serious problem, and consider that pet cat management is an important component of managing feral cats. This is one of the key reasons that councils continue to strongly advocate for the ability to set cat curfew or containment requirements. This would reduce the number of pet/domestic cats roaming and therefore reduce the potential for them to contribute to the feral population.

**Recommendation 4:** Amend the *Companion Animals Act 1998* to enable councils to introduce cat containment policies in their local government areas.

## Deer

Deer numbers and range continue to expand. For example, MidCoast Council has continued to receive community reports regarding deer population expanding in urban and peri-urban areas including areas around Wallis Lake and on islands within the lake. Land tenure is mixed, including areas managed by the council, National Parks and Wildlife Service, and private landholders.

Control measures are limited, expensive and have challenges such as securing landholder support. For example, for getting landholder agreement to allow ground shooters onto private property. Although there is a General Biosecurity Duty (GBD), this doesn't extend to specifying how/what landholders must do. Councils or Local Land Services (LLS) are therefore often reliant on achieving social licence and landholder support before they can progress physical control measures on private land.

Resourcing is also a significant issue. Aerial shooting, on-ground shooting and carcass removal and management are costly exercises – often beyond the reach of any one organisation – and require coordination across tenures. In the MidCoast region, a project officer has been funded through bushfire recovery funding to provide education and engagement activities, including encouraging the community to report sightings and garnering social licence for control measures. A single organisation such as a council would not have the resources for this work, however with NSW Government funding and multi-agency support, the project has been able to proceed.

In short, even though the biosecurity framework assigns responsibility to individuals (via the GBD), a landscape-scale approach to managing invasives is necessary. All parties need to be involved and contributing (expertise, networks, time, equipment), with base funding ideally coming from the state and/or federal government.

**Recommendation 5:** Federal and/or NSW Government to provide base funding for landscape-scale invasive species programs, so as to provide core support / functionality.

### 3. What, if any, are the key barriers to effective management of invasive species?

From local government's perspective the key barriers commonly hampering the effective management of invasive species include:

- Lack of general community awareness of GBD or the risks/threats posed by invasive species.
- Lack of resources for:
  - Broader community and land manager education and awareness, including for absentee landowners;
  - Invasive species identification and control by all land managers;
  - Compliance and enforcement.
- Limited control / management options, particularly for inaccessible areas e.g. steep terrain and remote areas
- Differences in risk appetite or risk management requirements between parties can hamper control efforts.
- Governance framework limitations such as:
  - Definitions that are poor or lacking e.g. feral cats,
  - Lack of clarity in relation to roles/responsibilities and level of comprehension about how that works e.g. 'shared responsibility'.
  - GBD is not prescriptive nor specific and therefore invasive species management relies on building good relationships with land managers and community (which brings us back to the first point around the need to build community awareness).

#### Weed risk assessment

When assessing risk for species with limited data – mostly new incursions – the weed risk management system does not work effectively as it considers risk for one landscape type whereas weed risk will vary depending on the landscape it is in. Weeds Officers need to make risk evaluation assessments at a range of spatial scales (regional/local) for individual weed species. The current system is not designed to do this but rather to assess risk at the state-wide level.

To ensure an effective framework which enables risk-based decision making in relation to biosecurity the current weed risk management system needs to be reviewed. This review should provide additional components to enable finer scale assessments to be undertaken. Consideration should also be given to developing a new scoring system as the current scoring system can be problematic and not easy to follow. Weed risk assessment should also be aligned to the invasion curve and general biosecurity duty.

The identification of risk in a consistent way at an appropriate landscape scale is fundamental to the effective implementation of the Act. The issues outlined above with the weed risk management system (and consequently with the Regional Strategic Weed Management Plans - RSWMPs) mean they do not provide a strong basis for developing plans and programs that are commensurate to the risk at the right scale, let alone for communicating what general biosecurity duty looks like in that context.

**Recommendation 6:** That the weed risk management process that informs the implementation of the Act be reviewed and updated to enable finer scale assessments and improved scoring.

#### **4. How has invasive species management changed since the introduction of the NSW Biosecurity Act 2015 legislation and associated programs and plans?**

The Act provides a framework for authorised officers to respond to biosecurity incidents but there is not enough supporting information to effectively explain the framework and its importance to the community. Additional education is required to explain the Act concepts (such as General Biosecurity Duty (GBD) and 'reasonably practicable') to the wider community, along with clearer explanation of what is expected by members of the community, in order for the Act to be truly effective in achieving its objectives.

##### General Biosecurity Duty (GBD)

The Biosecurity Act provides a framework for the prevention, elimination, and minimisation of biosecurity risks, and a key objective is to promote biosecurity as a shared responsibility between government, industry, and communities. The Act introduced the GBD and a tenure neutral approach, which theoretically requires all parties to 'do their bit' to minimise biosecurity risks. However in practice there is limited and uneven awareness within the community of what the GBD means, what it entails and what would constitute someone fulfilling their duty. In short, by 'sharing' responsibility and therefore not outlining roles and responsibilities, the result is confusion and gaps in practice.

While it could be said that an outcomes-based biosecurity framework has greater ability to bring about change by including everyone, the challenge is that it relies on individuals understanding what they need to do, and to some extent, why. It gives individuals greater latitude in deciding how they will discharge their GBD, but to many people this is beyond what they are capable or interested in deciding. The result can often be disinterest or, where they do try to engage, it can be overwhelming.

Those responsible for enforcing the legislation, such as local control authorities in relation to weeds, can find it difficult to know how to apply it fairly and effectively, particularly in residential contexts. It is challenging to quickly yet effectively communicate the concept of GBD. There is also a lack of clarity on what constitutes biosecurity risk in various contexts.

Even when the GBD concept is grasped, the practical application of the GBD on ground is problematic, particularly for LCAs when undertaking compliance and enforcement. There is lack of clarity around what constitutes effective and 'reasonably practicable' management by a landholder. Individuals have provided a wide range of reasons as to

why they cannot or do not have to comply with the GBD on the terms of it not being 'reasonably practicable'. These include:

- the cost of undertaking control work verses productivity/income – as per s16(e) of the Act.
- the constant change in seasonal conditions
- labour/contractor shortage
- chemical shortage, availability or cost
- illness/poor health
- organic or alternate farmer – seeking to use not yet substantiated methods, or there is no data to show effective control work.
- risk of off-target damage
- conflict with other legislation e.g. Biodiversity Conservation Act, Local Land Services Act
- accessibility.

In addition, the definition of 'biosecurity impact' in section 13 of the Act is vague and subjective. Further guidance is required in defining or explaining how to determine if there is an 'adverse effect' on the community.

**Recommendation 7:** That the Biosecurity Act be modified as follows:

- 'reasonably practicable' be replaced, or at least defined with more prescriptive terminology so that it is clear to everyone what is required.
- 'biosecurity impact' be more clearly defined e.g. What is considered an impact on amenity, health, or infrastructure?

### Regional Strategies

The biosecurity framework provides for risk-based decision making through the Regional Strategic Plans, such as Regional Strategic Weed Management Plans (RSWMPs) and the weed risk management system in the case for invasive plants. However, these components of the framework are not specifically referred to in the Act and therefore are limited in their effectiveness, particularly from a compliance perspective.

The Plans are targeted to all individuals as well as public and private organisations that occupy land and are therefore responsible for managing weeds. However the plans do not have a legal basis and actions are couched in terms of what 'should' be done rather than 'must'. This makes compliance and enforcement more difficult e.g. if a landholder wants to argue what they are or are not doing on-ground doesn't align with the RSWMP priorities, they can say the plan only outlines what they 'should' do. The legal status of regional plans needs to be mandated or strengthened.

**Recommendation 8:** Consider and consult on the mandating of Regional Strategic Management Plans (for pest and weeds).

## **5. What are the future risks posed by invasive species to the NSW environment, industries and communities?**

The future risks posed by invasive species are many and varied, including:

### Environment

- Increased competition / out-competing native flora and fauna, potentially leading to local or wider extinctions.
- Modifying ecosystem functions, altering fire regimes and hydrology leading to further changes in the viability of native species

### Industry

- Increased costs of managing invasive species to limit their impacts to current levels or to try a reduce impact e.g. invasive species numbers increase, or more treatment is required to achieve the same population reduction.
- Reduced productive capacity of the landscape as a result of the expansion of invasive species range and scale (competition) or interruption.
- Degradation of land from the invasive species (e.g. soil compaction) or the chemicals/measures to treat them.
- Tourism and hospitality impacted by reduced accessibility and aesthetic value

### Community

- Health impacts from invasive species eg Green Cestrum, Red Imported Fire Ants
- Reduced property values or jobs as a result of reduced productive capacity
- Reduced access to green spaces e.g. due to weeds toxic to humans, or dangers posed by invasive species.

A changing climate also has the potential to shift the viability and range of invasive species at the same time that native species and communities are looking to shift and adapt. Increased heat, rainfall, flood and bushfire events may favour some invasive species, exacerbating their spread and impact on the environment and communities. For example, the distribution of Tropical Soda Apple was expanded along the Macleay River following the 2019 bushfires and subsequent floods.

There are also particular invasive species that have the potential to significantly affect all NSW residents day to day, such as:

- Red Imported Fire Ant – painful stings can cause anaphylactic shock and death, and outdoor areas previously used for sport, recreation, etc become unusable unless treated. The ants can also damage crops, kill newborn livestock and prevent livestock reaching water in dams without being seriously stung. Their prolific and high density colonies can overwhelm native wildlife, and the costs of baiting and control are estimated in the billions of dollars.

This invasive species has the potential to dramatically impact the Australian way of life, with significant costs incurred across all parts of the community either for control, lost productivity or increasing costs of goods and services. The NSW

Budget 2023 made an \$80M commitment to tackle Red Imported Fire Ants. Whether this amount is sufficient remains to be seen.

- Varroa mite – efforts to eradicate Varroa have not been successful and measures are now focused on containment. Varroa has already had significant impact on the bee industry and this has a flow on impact on the industries reliant on pollination services for food production. If Varroa is not contained, food production impacts could see food costs for the broader community increase and their access to food and the variety of food available also reduced.

## **6. What opportunities do you see to improve the outcomes of invasive species management in the future?**

Opportunities to improve invasive species management outcomes are summarised below.

### Knowledge

- Increase surveillance for early detection of new incursions (links to collaboration points below).
- Continued / upscaled research on invasive species controls, including biological control, and their application.
- Liaising with university programs for further research into integrated pest management.
- Facilitate greater knowledge sharing on control methods across stakeholders
- Widespread community education programs to increase awareness of biosecurity responsibilities, risks and responses.
- Geo-spatial timeline assessments of weed cover/impact for baseline and progressive data collection for weed management programs.

### Collaboration

- Greater collaboration within government, and with other spheres of government, to maximise efficiencies.
- Greater collaboration across land managers and with the community. Citizen scientists are a currently untapped resource for reporting any unusual species in their area.

### Resources

- Increase funding and capacity for invasive species identification and control (specific suggestions outlined earlier in this submission).
- Prioritise and commit fully to eradication programs over a longer term. What may seem a high cost initially is likely to be a small drop compared to the costs incurred in perpetuity of managing the new invasive species.
- Conduct current-state and altered-climate risk assessments of potential range / distribution for high priority species, particularly those targeted for eradication.
- Reducing the administrative burden of relatively small grants, as this acts as a deterrent to applicants. Application and reporting requirements need to be commensurate with the risk.

- NSW Government to create a biosecurity prosecution fund to support local control authorities with enforcement of the *Biosecurity Act 2015*.

## Conclusion

LGNSW appreciates the opportunity to provide input to the NRC's review of invasive species management. Given local government's role in relation to weed management this submission has focused in large part on barriers and improvements in relation to plant invasives (weeds). Many of these insights are also relevant to the management of invasive animals.

One of the greatest challenges for NSW is increasing the wider community's awareness of biosecurity responsibilities, risks and responses. Although the Biosecurity Act provides flexibility with outcomes-focused concepts like 'shared responsibility' and 'general biosecurity duty', individuals often prefer clear rules or requirements. Similarly, trying to enforce compliance with outcomes-focused legislation presents challenges for local control authorities, which seek greater support from both the legislation and from government agencies.

Other key barriers to more effective invasive species management include insufficient resourcing and capacity, limited control methods for some species, and risk assessments for prioritising weeds that are too coarse in scale.

We look forward to further discussing issues and recommendations raised in this submission with the NRC, and look forward to further improving invasive species outcomes in NSW.

