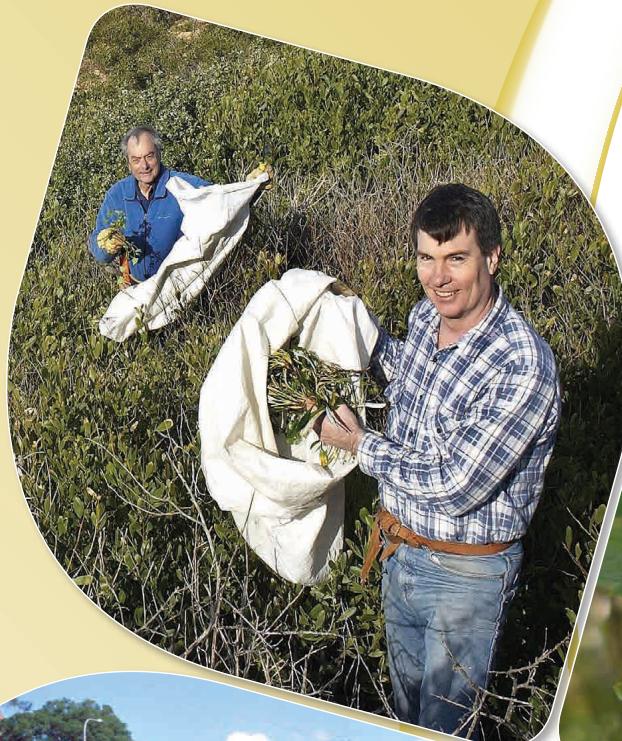




Local Land
Services
Greater Sydney

Greater Sydney Regional Strategic Weed Management Plan

2017 - 2022 - Revised July 2021



Developed in partnership with the
Greater Sydney Regional Weed Committee

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing in May 2019. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser.

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Front Cover photographs (clockwise from top left)

Weed control by volunteers

Boneseed *Chrysanthemoïdes monilifera* subsp. *monilifera*

Honey locust *Gleditsia triacanthos*

Harvesting salvinia, Hawkesbury River

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Acknowledgement of Country

The Greater Sydney Local Land Services region is situated in the traditional lands of the Darug, Darkinjung, Eora, Dharawal, Guringai, and Gandangurra nations. The Greater Sydney Local Land Services Board acknowledges and pays its respects to Elders, both past and present of these nations.

We acknowledge that the protection and promotion of Aboriginal culture, heritage, traditional land management practices and spiritual beliefs is an issue of great importance to the traditional owners of these lands and waters and is of benefit to the whole community. Stronger shared cultural values, will ensure a more reconciled and resilient community in the Greater Sydney region.

Acknowledgement of contributors

This plan was developed by the Greater Sydney Regional Weed Committee on behalf of the Greater Sydney Local Land Services Board for endorsement by the board. The Greater Sydney Local Land Services Board wishes to acknowledge the work of the committee and regional support staff in developing this plan. The board would also like to thank the Technical Sub Committee of the State Weeds Committee for their support in weed risk prioritisation and the State Weeds Committee, Office of Environment and Heritage and Department of Primary Industries for their guidance in the development of this plan.

We also wish to acknowledge that some text within this plan was drawn from a range of NSW DPI publications, including the draft Invasive Species Plan, NSW Biosecurity Strategy 2013 – 2021 and the *Biosecurity Act 2015 Discussion Paper: Weeds*. Development of this plan was supported through NSW Weeds Action Program funding from the NSW Government.

We would especially like to thank members of the Greater Sydney Regional Weed Committee who formed the technical subcommittee which was largely responsible for developing the regional priority weeds list including regional weed risk assessments for all species identified on the list.

The instrumental role of Anthony Schofield, Project Officer in preparing sections of this plan, and in coordinating, reviewing and amending the plan is recognised and appreciated.



Top row: Graham Wilson - Chair (Greater Sydney Local Land Services), Paul Marynissen (Central Coast Council), Jillian Macintyre (Northern Beaches Council), Judy Lambert (Nature Conservation Council), Mel Hall (National Parks & Wildlife Service), Michael Danelon (Nursery & Garden Industry Assoc.), Tony Williams (Aboriginal Landholders)

Middle row: Chris Dewhurst (HRCC), Steve Smith (Mosman Council), Leanne Bunn (Randwick Council), Jacob Adams (Water NSW), Mal Decker (Transport NSW), Samir Patel (Transport NSW), Rob Adam (Greater Sydney Local Land Services)

Bottom row: Matthew Keighery (Landcare), Stan Rees (NSW Dol Lands), David Banham (NSW Farmers Assoc.), Rod Ensbey (NSW DPI), Anthony Schofield, Erin Fardy (Sutherland Shire Council)

Absent: Matthew McNaughton (Camden Council), Tracey Austin (Roads & Maritime Services)

Chair's foreword

Terry Charlton, Chair Greater Sydney Local Land Services

I am pleased to present this first Regional Strategic Weed Management Plan on behalf of Greater Sydney Local Land Services and members of the Greater Sydney Regional Weed Committee. This plan provides the framework for managing weeds in the Greater Sydney Local Land Services Region, in accordance with the NSW Invasive Species Plan and the *Biosecurity Act 2015*.

The plan sets out strategic direction in weed management and control for the next five years. It will guide investment into weed control and compliance effort across the Greater Sydney Local Land Services region. It focuses on coordinated weed management and identifying the regional priorities to manage the risks associated with weeds entering, establishing and spreading within the Greater Sydney region and neighboring regions. The most important message of the plan is that managing weeds is a shared responsibility and that government, industry and the community of Greater Sydney must work together to protect our economy, environment and community from the negative impacts of weeds.



I would like to thank the members of the Greater Sydney Regional Weed Committee, Council Weed Officers and other stakeholders who contributed to the development of this document with their expertise and time. I wish to especially recognise the contribution to the work of the Committee made by its community members who gave so freely of their own time to help develop the plan.

Graham Wilson, Chair Regional Weed Committee

On behalf of the Greater Sydney Regional Weed Committee I am pleased to present the Greater Sydney Regional Strategic Weed Management Plan. The plan has been developed by the Greater Sydney Regional Weed Committee with input from members including representatives from Local Land Services, Local Control Authorities (i.e. local governments), NSW Department of Primary Industries, National Parks and Wildlife Service, environmental interests (i.e. Nature Conservation Council), Landcare, NSW Farmers Association, Nursery and Garden Industry Association, Aboriginal land managers and public land managers (i.e. Transport NSW, Roads and Maritime Services, Water NSW, NSW Department of Industry - Lands) and the broader community across the Greater Sydney region.



The plan aims to deliver on a major commitment in the Government Response to the Natural Resources Commission Review of Weed Management in NSW. This plan adopts a 'tenure neutral' approach to weed management. It is targeted to all individuals as well as public and private organisations that occupy land, and are therefore responsible for managing weeds. This is consistent with

the concept that weed management is a 'shared responsibility' and that every individual and organisation has a general obligation to minimise the risks of weeds establishing and spreading.

The objective of the plan is to establish a framework for coordinated management of weeds at the regional scale, and to determine regional priorities so that investment can be directed towards those activities which will achieve the greatest outcomes in terms of preventing weeds from establishing, eradicating new weeds and minimising the impact of weeds where established.

I would particularly like to thank members of the Regional Weed Committee and the four Subregional Weed Committees for their effort and diligence in contributing to this Plan's development and technical content, and for their ongoing commitment to a coordinated approach to managing weeds.

Implementing this plan will be challenging. It will require ongoing commitment from many stakeholders in both the public and private sectors and the whole community. Local Governments are vital. Their existing responsibility and resources for weed management, on which this plan rests, must continue as the foundation for this plan's on-ground activities.

This region's large urban population, major industries and complex city infrastructure, combined with many peri-urban land owners and associated businesses, and with the outstanding natural resources with which this region is endowed (including Sydney Harbour, the Blue Mountains and iconic national parks) is both a major challenge and a great opportunity to achieve effective weed control.

Already thousands of volunteers, working in local Landcare and Bushcare networks, working side by side with officers of local governments and national parks, are making an enormous contribution to control of weeds in natural areas and parks, already the nursery industry is actively encouraging environmentally friendly plantings, already businesses and infrastructure providers are seeking to manage weeds on their lands.

It is intended that this plan is a key enabler of allowing all this existing work to be done better, through building cooperative partnerships between all participants within a locality or catchment and by ensuring that the effort of one is not wasted by either the duplication or inaction of another.

It is critical that the resources going into weed control are targeted on agreed priorities such as within upper catchments or weed movement corridors, dealing with new or localised infestations and protecting key assets from weed invasion. By focusing on agreed priorities I am confident that more can be achieved with these limited resources and that, within the five year life of this plan, we will all see demonstrable improvements in the extent and impacts of major weeds within our region.

Executive Summary

Our vision

Biosecurity protects the economy, environment and community from the negative impacts of pests, diseases and weeds. As such, it is vital for the health, wellbeing and prosperity of the state. Within this region weeds are one of the key threats to agriculture, other industries, public amenity, and natural environments due to their invasive potential. This allows them to colonise a wide range of environments including farmlands, urban areas, infrastructure corridors, coastlines, waterways, parks and bushland.

The Greater Sydney Regional Strategic Weed Management Plan focuses on managing weeds to improve the region's biosecurity. Our vision is to protect the region's environment, landscape, livelihood, cultural and lifestyle values from weeds by strengthening the sustainability of the natural environment, primary industries, and local communities in the region.

In line with new Commonwealth biosecurity measures NSW has reformed its weed, pest and disease legislation. Together, the NSW Biosecurity Strategy 2013-2021 and *NSW Biosecurity Act 2015* (which repeals the *Noxious Weeds Act 1993*) provide a streamlined, clear framework for safeguarding primary industries, natural environments and communities from a range of pests, diseases and weeds. Community-wide shared responsibility for biosecurity and a tenure-neutral approach are crucial to realise the vision of a sustainable and prosperous future.

The Greater Sydney Regional Strategic Weed Management Plan is a direct response to this strategic and legislative reform. It was prepared by the Greater Sydney Regional Weed Committee on behalf of the Greater Sydney Local Land Services Board, with guidance from the State Weeds Committee and Local Land Services staff.

Working together

The plan outlines how government, industry and the community will share responsibility and work together to identify, minimise, respond to, and manage weeds. It relates to all lands and waters (excluding marine) in the Greater Sydney Local Land Services region of NSW. It focuses on managing weeds that impact:

- animal and plant industries, including agriculture, horticulture, forestry, aquaculture and recreational and commercial fishing in freshwater systems
- ecological communities and biodiversity, including natural urban and peri-urban environments
- human health, livelihood, lifestyle, cultural values, recreation and landscape amenity
- infrastructure and service industries, including energy, transport and water supplies.

The plan sets the vision and goals for weed management in Greater Sydney, and outlines strategies and actions to achieve outcomes based on principles of shared responsibility, sustainable landscapes, collaborative leadership and innovation.

Vision:

Government, industry and the people of the Greater Sydney region working together to protect the environment, economy and community from the negative impacts of weeds.

Goal 1: Responsibility for weed biosecurity is shared by all people of the Greater Sydney Region, including organisations and businesses

Actions focus on a whole of community approach to weed management, with an emphasis on:

- building community capacity
- building stronger partnerships
- fostering a shared responsibility
- increasing awareness.

Goal 2: Weed biosecurity supports profitable, productive and sustainable primary industries and

Goal 3: Weed biosecurity supports healthy, diverse and connected natural environments

Actions focus on weed biosecurity to protect the environment, and foster sustainable economic growth. The emphasis is on:

- preventing new weeds from entering the region
- eradicating or containing the spread of new weeds that do establish
- managing widespread weeds on priority sites.

Goal 4: Weed biosecurity is supported by coordinated, collaborative and innovative leadership

Actions focus on consistent approach to implementing this plan, with emphasis on:

- providing good governance and leadership to support a collaborative approach
- supporting and delivering the weed biosecurity reforms for NSW
- implementing risk based systems across all tenures in a co-ordinated manner
- using information and mapping systems, current research and adaptive management to improve effectiveness of weed control.

Sharing responsibility

The plan provides a sound basis for a co-operative and co-ordinated approach to managing weeds in the Greater Sydney region. It defines what "shared responsibility" means for the region's communities and stakeholders, and how they might work together to identify, minimise, respond to and manage high risk weeds at a landscape scale, both now and into the future.

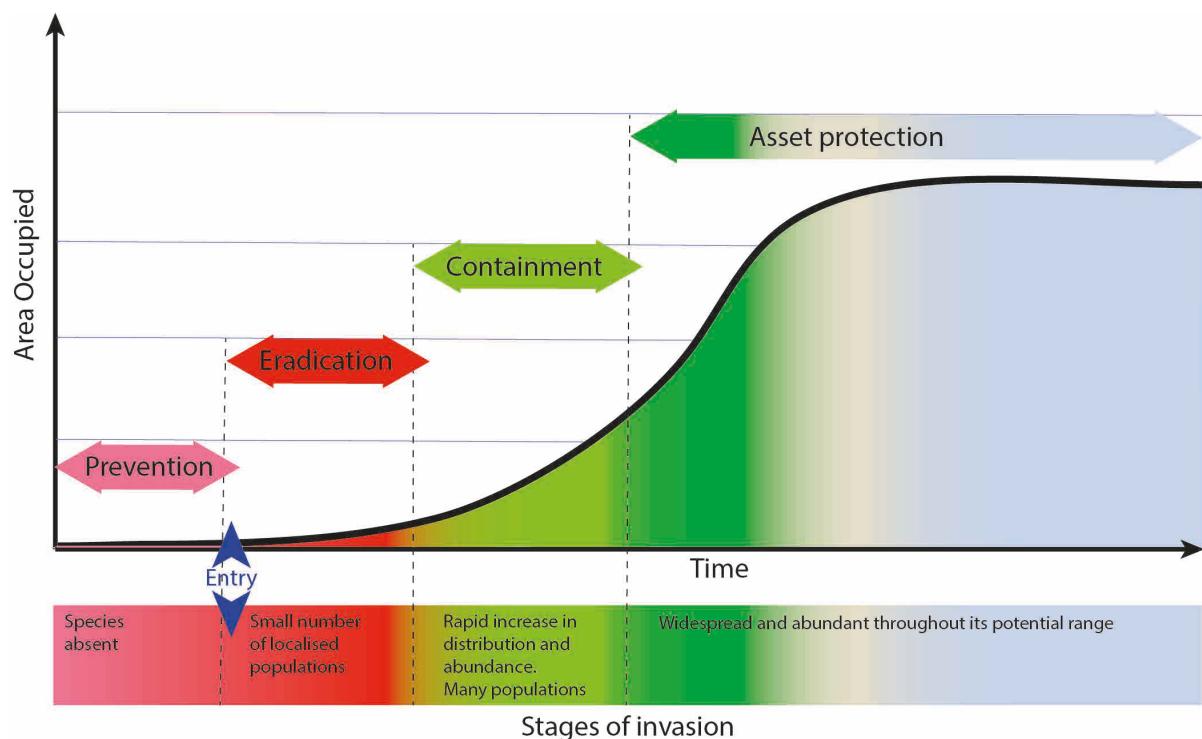
The *Biosecurity Act 2015* is tenure neutral, as it applies equally to all land in the region, whether public or private. The Act contains a range of new regulatory tools and a General Biosecurity Duty that support this tenure neutral approach to managing weed biosecurity risk. These tools include Prohibited Matter, Biosecurity Zones, Mandatory Measures and Control Orders and the plan outlines how they might be applied.

The plan outlines how land managers might meet requirements under the General Biosecurity Duty: *the responsibility of any person who has any dealing with weeds (biosecurity matter), whether they have an infestation on their land, are selling a potentially invasive species, dumping garden rubbish, or supplying contaminated fodder or the like must prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable)*. **Biosecurity Act 2015**

Weed Priorities

State-wide management of weeds is directed by the NSW Invasive Species Plan. This assigns weed responses to four categories: prevention of new weeds establishing, eradication of small and localised infestations where feasible, containment of larger infestation to stop wider spread, and protection of key assets to prevent their damage or degradation by weed invasion (e.g. threatened plants and farmlands)

An expert panel used best available knowledge and an internationally-recognised risk-assessment process to identify the region's high-priority weed species. Weed prioritisation is guided by the principle that *managing weeds earlier rather than later is more cost effective*. The region's weed management objectives support this principle and prioritises outcomes which can be achieved in the early stages of the invasion process.



The plan identifies regional priority weeds, including management objectives and “outcomes to demonstrate compliance with the General Biosecurity Duty”, which for those weeds clearly define community expectations for land managers to meet their General Biosecurity Duty. The plan also identifies state level and other priority weeds to provide further focus to weed management in the region.

Building on the past

The Greater Sydney Regional Weed Committee (RWC) was established as a local community advisory group under the *Local Land Services Act 2013*. Development of this plan was its initial focus. The role of the committee will now shift to overseeing the plan's implementation.

The Committee provides strategic planning and co-ordination of weed management activity at a regional level. It works closely with the State Weeds Committee (SWC), whose charter is to ensure a consistent, coordinated and strategic approach to weed management across the state of NSW.

A range of stakeholders have played an important role in weed management planning in the region over many years. This plan builds on past efforts and has gained immeasurably from the accumulated experience and expert local knowledge of committee members and their networks. The Greater Sydney Regional Weed Committee includes representatives from Local Government (including Hawkesbury River County Council), NSW Department of Primary Industries, State government agencies managing state owned lands (Office of Environment and Heritage, Roads and Maritime Services, Transport NSW and NSW Department of Industry – Lands), NSW Farmers Association, Landcare, Aboriginal land managers, environmental interests and Greater Sydney Local Land Services.

Implementation

The plan will guide investment in weed management across the region and provide a consistent basis for regional weed planning and implementation. The regional weed committee will play an important role in overseeing and coordinating implementation of the plan. Stakeholders will implement the plan's objectives within a framework of:

- shared responsibility for weed management
- consistent tenure neutral and prioritised weed management planning, investment and control across the region
- strategic communication, capacity building and engaging partners, stakeholders and the broader community
- coordinated and integrated information management guiding adaptive management and research
- performance measurement that focuses on shared responsibility, sustainable landscapes and collaborative leadership and innovation
- robust monitoring, reporting, evaluation and improvement.

Identifying local stakeholder roles, responsibilities and partnerships is integral to developing these measures efficiently and effectively.

It is expected that over time all public and private land managers, along with local governments will build this plan and its priority setting into their own business and operational plans, so resources are directed to meet specified objectives within this plan. Where there is a long term unwillingness to comply with this plan it is intended that the power to enforce its provisions operates through the tools within the *Biosecurity Act 2015*.

1. Intent of Plan

1.1 Introduction

Biosecurity is vital for the health, wellbeing and prosperity of everyone in NSW. It is about protecting the economy, environment and community from the negative impacts of pests, diseases and weeds. The Greater Sydney Regional Strategic Weed Management Plan provides a framework for regional weed management. The plan supports regional implementation of the NSW *Biosecurity Act 2015* by articulating community expectations in relation to effective weed management and facilitating a coordinated approach to weed management in the region. The plan (and the legislation that underpins it) is based on the premise that biosecurity is everyone's responsibility. It supports development of this culture, guiding the community in effective and coordinated management of weeds and meeting relevant statutory obligations.

The plan relates to all lands and waters (excluding marine) in the Greater Sydney Local Land Services region of NSW (Figure 1.1). Figure 1.2 (next page) shows all Local Land Services regions in NSW, and provides the State level context of the Greater Sydney region.

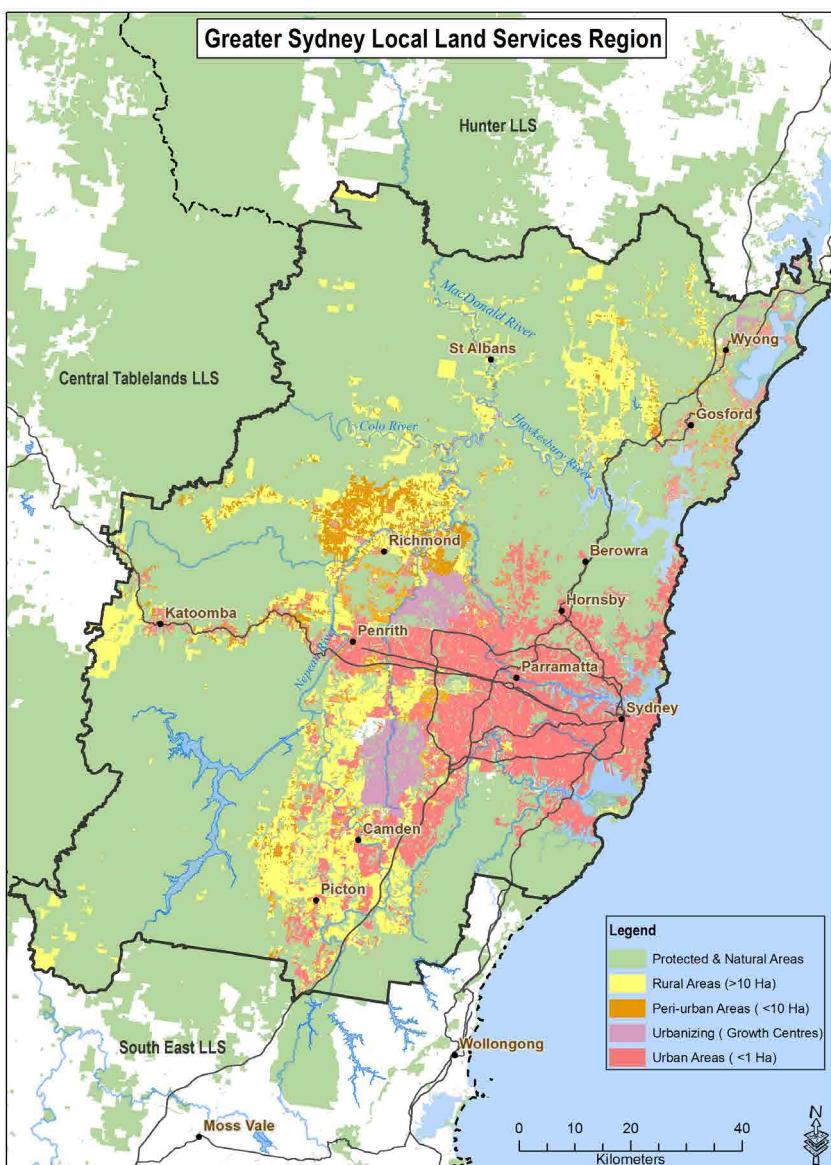


Figure 1.1: Greater Sydney Local Land Services region

Local Land Services regions

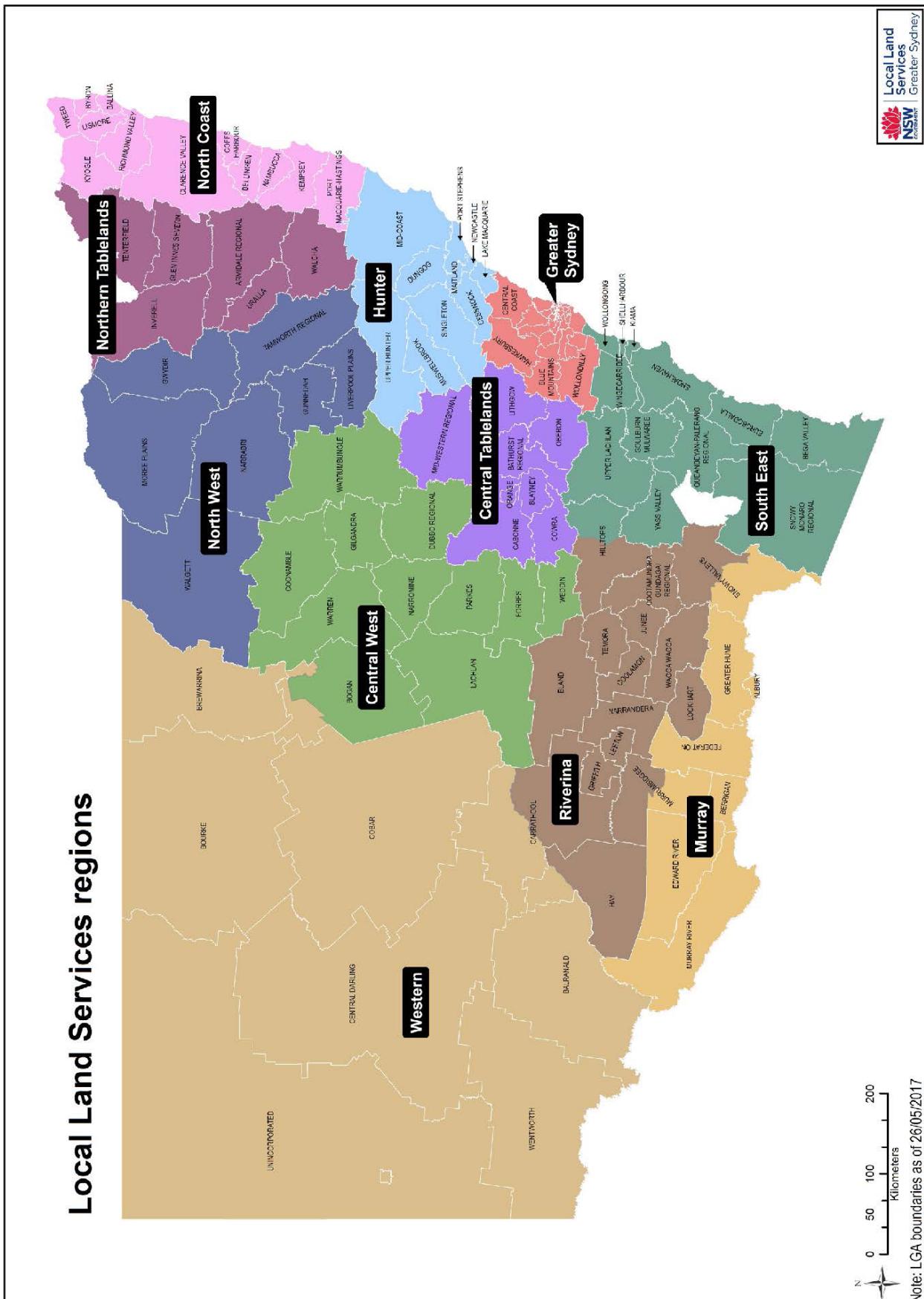


Figure 1.2: Greater Sydney Local Land Services regions

This plan has built on past planning efforts, and has gained immeasurably from the accumulated experience and expert local knowledge of regional weed committee members and their networks. It will guide resource allocation and investment in the region and provide a consistent basis for regional planning and delivery.

Biosecurity is everyone's responsibility. This plan supports development of that culture and guides the community in effective management of weeds and how to meet their statutory obligations.

The Greater Sydney Regional Strategic Weed Management Plan implements the NSW weed reforms, Biosecurity Strategy and Invasive Species Plan in relation to weeds for the Greater Sydney region. It has been prepared by the Greater Sydney Regional Weed Committee on behalf of Greater Sydney Local Land Services Board, and covers weed risks that impact:

- animal and plant industries, including agriculture, horticulture, forestry, aquaculture, recreational and commercial fishing
- biodiversity of natural, urban and peri-urban environments (terrestrial and aquatic)
- human health, livelihood, lifestyle, recreation and landscape amenity
- infrastructure and service industries, including energy, transport and water supplies.

This plan sets the vision, goals and objectives for weed management in the Greater Sydney Local Land Services region for the next five years and outlines the strategies and actions through which these goals will be achieved.

1.2 Vision, Goals and Objectives

This plan provides a sound basis for a co-operative and co-ordinated approach to weed management, and outlines how government, industry and the community share responsibility and will work together to identify, minimise, respond to and manage high risk weeds.

The Vision for this plan is:

Government, industry and the people of the Greater Sydney region working together to protect the environment, economy and community from the negative impacts of weeds.

The goals, objectives and outcomes for this plan align with those of the NSW Biosecurity Strategy 2013-2021 and the Greater Sydney Local Land Services Local Strategic Plan 2016-2021, which provide the overarching policy framework.

The Goals for the Greater Sydney region are that:

1. Responsibility for weed biosecurity is shared by all people including organisations and businesses
2. Weed biosecurity supports profitable, productive and sustainable primary industries
3. Weed biosecurity supports healthy, diverse and connected natural environments
4. Weed biosecurity is supported by coordinated, collaborative and innovative leadership.

The objectives of this plan, outcomes we expect to see, and the strategies to achieve them, are shown in Table 1.1.

Table 1.1: Vision, Goals, Outcomes, Objectives and Strategies of the plan

Vision	Government, industry and the people of the Greater Sydney region working together to protect the environment, economy and community from the negative impacts of weeds.	Shared Responsibility	Sustainable Landscapes	Collaborative Leadership and Innovation
Goals	1. Responsibility for weed biosecurity is shared by all people including organisations and businesses	2. Weed biosecurity supports profitable, productive and sustainable primary industries	3. Weed biosecurity supports healthy, diverse and connected natural environments	4. Weed biosecurity is supported by coordinated, collaborative and innovative leadership
Outcomes				
	<p>• Community, industry and government share responsibility for weed management and have a clear understanding of their roles and obligations.</p> <p>• People have the skills, knowledge, capacity and capability to deliver weed management activities.</p> <p>• Strong supportive partnerships have improved weed management for all partners.</p> <p>• Awareness of weed management in the region has improved, with communication and engagement, proactive and inclusive.</p>	<p>• Weed management is integrated and co-ordinated across all tenures.</p> <p>• Weeds are monitored at landscape and industry scales and developing problems are proactively managed.</p> <p>• Weed management is supporting landscape health and key assets important to biodiversity.</p> <p>• Primary industries are using leading weed management practices that contribute to increases in productivity, sustainability and market access with minimal impacts on natural resources.</p> <p>• Sensitive aboriginal cultural heritage areas are protected.</p> <p>• Weed biosecurity threats are continually identified, assessed and prioritised across Greater Sydney region environments and primary industry sectors.</p>	<ul style="list-style-type: none"> • Engagement, collaboration and involvement of local people in decision making are co-ordinated. • Relevant and timely information supports decision making by the Greater Sydney Regional Weed Committee and the State Weeds Committee. • Information, monitoring, performance evaluation and reporting systems, provide for benchmarking, continuous improvement, stakeholder feedback and innovation. • A strong evidence and knowledge base is supporting innovation and strengthening research. • Changes in weed behaviour under a changing climate are being understood and monitored. 	<ul style="list-style-type: none"> • Weed management, monitoring, performance evaluation and reporting systems, provide for benchmarking, continuous improvement, stakeholder feedback and innovation. • Impacts on high priority assets have been minimised through risk based weed management programs

<p>Objectives</p> <ul style="list-style-type: none"> • Communicate a clear strategic vision and build support for a strong and integrated biosecurity system for the region. • Provide the foundation for all customers and stakeholders to work together, and to fully utilise knowledge and expertise across all groups. • Foster accountability for weed management in the region at all levels 	<p>• Improve effectiveness in prevention and response to new weed incursions.</p> <p>• Prevent, eradicate, control and manage the impacts of weeds.</p> <p>• Understand and have regard for the impacts of a changing climate on weed biosecurity.</p> <p>• Provide a framework for more detailed planning, monitoring and reporting of weed management programs.</p> <p>• Provide guidance for weed management prioritisation, decision making and actions at a regional level</p> <p>• Support consistent and coordinated regional weed management planning and local delivery</p> <p>• Support leading practice in weed management through ongoing creation and sharing of knowledge and spatial information.</p> <p>• Provide governance and leadership that supports collaborative, effective and efficient weed management</p> <p>• Adopt adaptive, contemporary planning and processes</p> <p>• Develop a regional invasive weed knowledge base and information system that supports state standards</p> <p>• Develop consistent systems for monitoring, evaluating and reporting on the effectiveness of weed management</p> <p>• Improve surveillance, reporting and tracing systems for weeds</p> <p>• Improve prevention, preparedness and response to weed emergencies</p> <p>• Eradicate or prevent the spread of new weeds</p> <p>• Contain and manage impacts of widespread weeds</p> <p>• Support and utilise developments in weed science and technology</p> <p>• Use results of research [for example, Weed Futures, Bioclim, ANUclim] to assess and respond to changing risks under a changing climate</p>
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1.3 A more strategic approach to weed management

1.3.1 Drivers

Weeds are a major threat to Australia's natural environment. The impact of weeds on Australian agriculture alone, are estimated to be \$2.5 billion in lost production and \$1.8 billion in control activities every year (NSW DPI, 2015). Impacts on biodiversity and natural environments are harder to quantify, but equally significant.

As well as increasing costs of weed control, a range of developments are increasing the need to manage weeds more strategically and efficiently:

- NSW weed management reform, identified in a *Review of Weeds Management in NSW* (Natural Resources Commission in 2014). This followed reform of Commonwealth biosecurity measures in 2012, alignment of state legislation, and measures for better cross-jurisdictional biosecurity management around the country.
- Globalisation is integrating the world economy with rapid growth in trade, tourism, passenger and cargo movements. This is increasing the risk of pest, disease and weed incursions.
- The global climate is more variable and less predictable, with more extreme weather events, increasing average temperatures and other changes expected. These changes are likely to favour the establishment, spread or shift of some weeds and limit the distribution and impact of others. For example, an increase in the frequency and intensity of wildfire will result in large areas vulnerable to weed spread. Fire fighting vehicles and equipment are also potential vectors for weed spread.
- The demand for food is continually increasing, with modelling indicating global food production will have to double between now and 2050 to keep up with demand. We need to do everything we can to protect our capacity to produce food from the negative impacts of weeds.
- Herbicide resistance is a growing problem, particularly with the development of resistant crops. There is also a trend towards growing organic produce in western countries, and concern about the impact of pesticides on health.
- Pressure to maintain profitability and increase efficiency are ongoing in government, industry, and business sectors with an ageing population and an increasingly global economy. It is crucial that limited resources for weed biosecurity are used wisely, with constructive partnerships and clear decision-making processes established.

Technological developments are creating opportunities to improve the cost effectiveness of on ground weed control, improving capacity to work more strategically at a landscape scale. Planning for weed management must consider the effectiveness and efficiency of control measures so that the cost is commensurate with the benefit.

The NSW Biosecurity Strategy 2013-2021 outlines the measures needed to align NSW with Commonwealth and other state biosecurity policies. This led to the development of the NSW Biosecurity Act 2015, which replaces 14 other pieces of legislation and establishes a clear framework for safeguarding primary industries, natural environments and communities from biosecurity threats.

The emphasis in the NSW Invasive Species Strategy and biosecurity legislation is on prevention of invasive species and early intervention in the incursion process (Figure 4.1). Early and strategic investment to prevent and eradicate invasive species provides more cost effective and successful weed control outcomes.

1.3.2 Weed committees and development of this plan

The NSW weed reforms recommended that Local Land Services assume responsibility for forming a weed committee in each region to act as a Community Advisory Group and provide appropriate support for weed management and planning. The Greater Sydney committee includes representatives from Greater Sydney Local Land Services, NSW Department of Primary Industries (NSW DPI), state government agencies managing state owned lands (including the Office of Environment and Heritage (OEH), Roads and Maritime Services, Transport NSW and Department of Industry - Lands, local government including the county council, NSW Farmers Association, Nursery and Garden Industry Association, Landcare, environmental interests and Aboriginal land managers. Through this representation, the committee provides tenure neutral strategic planning and co-ordination of weed management activities at a regional level and also provides a forum for community and stakeholders in decision making.

The State Weeds Committee (SWC) was established to provide a state wide perspective in overseeing implementation of the weed management reforms, auditing, evaluating weed declarations, and providing state-level perspectives and governance. Their role includes developing service delivery standards for weed compliance and commissioning audits. The regional weed committee refers weed policy issues to the State Weeds Committee and will support the State Weeds Committee in the development and implementation of performance standards.

This plan represents a partnership between the regional weed committee and its representative organisations, including state government agencies, local government, stakeholders, the community and Local Land Services. Working together, the committee developed this plan for the Greater Sydney Local Land Services Board.

The relationship between Local Land Services, the Regional Weed Committee, the State Weeds Committee and other customers and stakeholders is shown in Figure 1.2. Government, industry, industry associations, research providers, universities, non-government organisations, individuals and the community as a whole all have a role to play in the management of weed biosecurity risks. Local Control Authorities play a particularly important role in weed management including enforcing the *Biosecurity Act 2015* with respect to weeds.

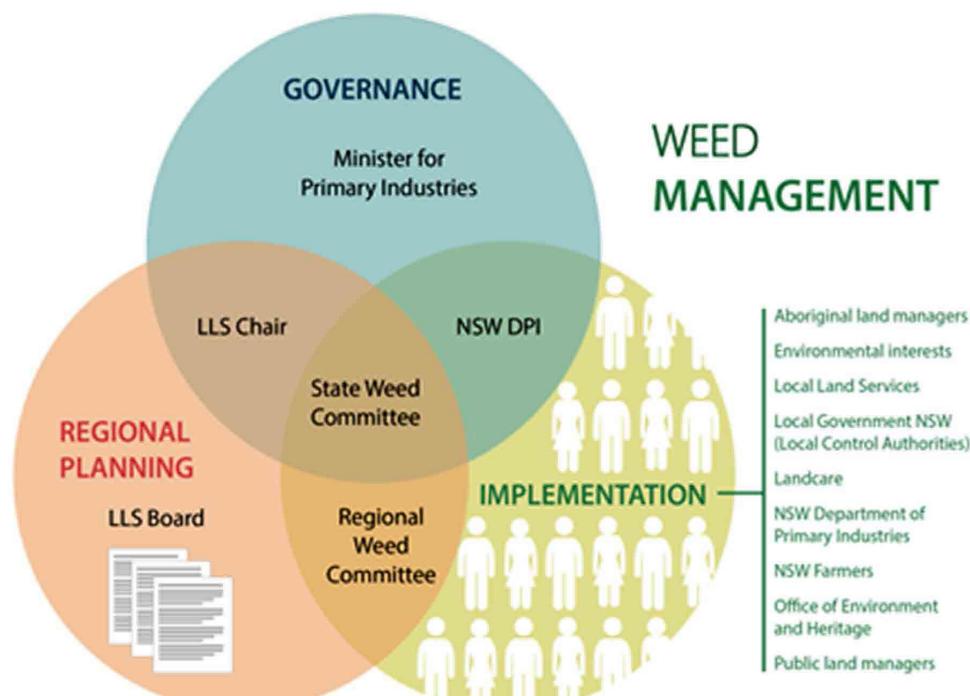


Figure 1.2: Roles in weed management

Figure 1.3 shows the relationship between the regional weed committee, the Greater Sydney Local Land Services Board and other Community Advisory Groups. The Board is accountable for establishment of the committee with appropriate representation and ensuring it continues to function effectively. Greater Sydney Local Land Services provides executive support to the committee.

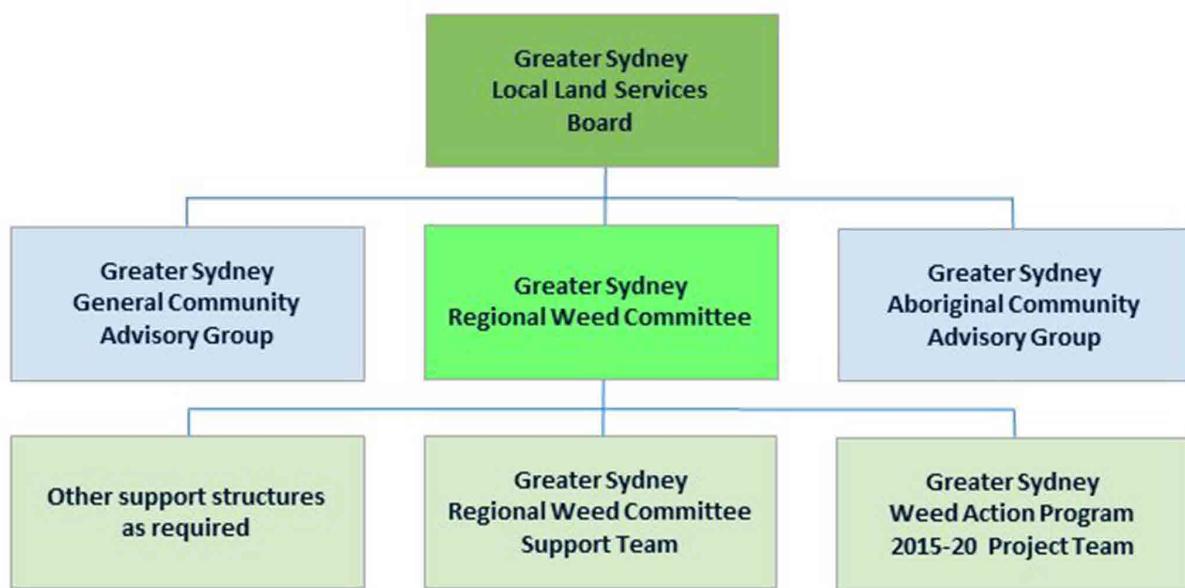


Figure 1.3: Regional Weed Committee relationship to Greater Sydney Local Land Services Board and other Community Advisory Groups.

1.3.3 Weeds and biodiversity

This plan focuses on managing weeds to improve the region's biosecurity and aims to protect the region's economy, environment and community from the negative impacts of weeds. The plan supports the NSW Invasive Species Plan and biosecurity legislation by prioritising prevention of invasive species and early intervention in the incursion process. In this regard, the plan focuses on priority weed species across all land uses and tenure.

Weeds pose the second greatest threat to biodiversity after land clearing and habitat loss in New South Wales. Many weeds that threaten biodiversity are widespread and usually beyond the scope of prevention and eradication programs.

The Office of Environment and Heritage (OEH) leads state-wide initiatives to reduce the impacts of invasive species on biodiversity. The Saving our Species program provides for the conservation of threatened taxa across all land tenures under the *Biodiversity Conservation Act 2016*.

In addition, *The Biodiversity Priorities for Widespread Weeds*, a joint project between NSW DPI, OEH and the former 13 Catchment Management Authorities (now Local Land Services), uses a site-led approach to identify and prioritise widespread weeds impacting on biological assets and sites for controlling weeds. See also section 3.2.

2. Policy and Planning Framework

2.1 Overview of key plans and legislation

The Regional Weed Committee considered a range of plans and strategies in development of this plan, at national, state and local levels. These are shown in Figure 2.1.

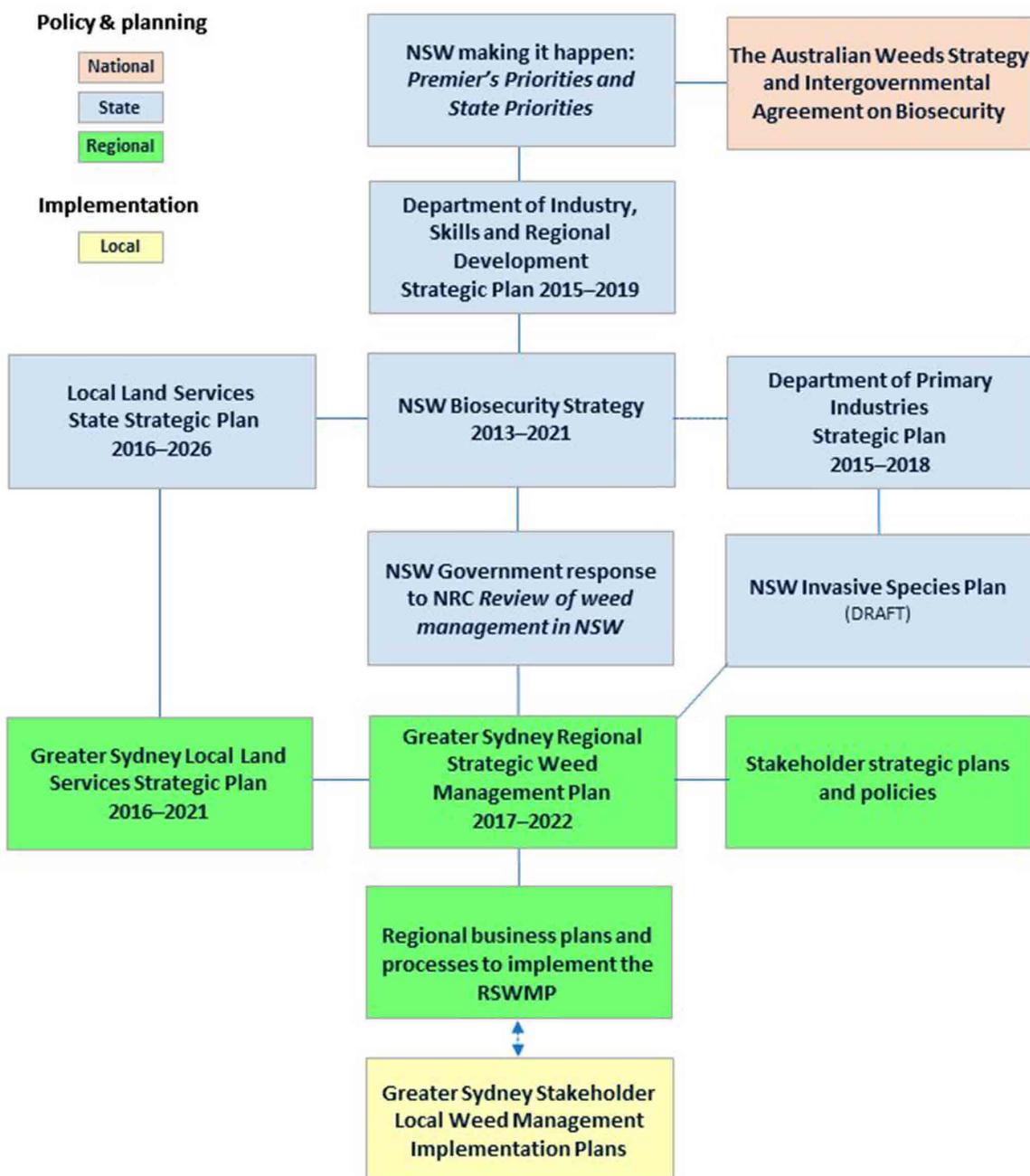


Figure 2.1: Overall planning framework for the Regional Strategic Weed Management Plan

2.2 Guiding legislation

The *NSW Biosecurity Act 2015*, *Local Land Services Act 2013* and *Local Government Act 1993* are the key legislation directing the implementation of this plan. The *Biosecurity Act 2015* takes effect with publication of the regulations in the NSW Government Gazette. The Act is administered by NSW Department of Primary Industries.

A range of other relevant state and national legislation will also influence how the plan is implemented. Key NSW legislation relevant to weed management that will continue to operate in tandem with the *NSW Biosecurity Act 2015*, are the:

- *Local Government Act 1993*
- *Local Land Services Act 2013*
- *National Parks and Wildlife Act 1974*
- *Biodiversity Conservation Act 2016*
- *Forestry and National Park Estate Act 1998*

The Crown Lands Management Bill 2016 has passed the NSW Parliament and the new act is likely to repeal the Crown Lands Act 1989 and certain other legislation early in 2018. Information about the new act is available from the Department of Industry - Lands website.

Biodiversity management in NSW is also being reformed, with the NSW government implementing recommendations from the Independent Biodiversity Legislation Review Panel. This includes the new *Biodiversity Conservation Act 2016*, and *Saving our Species* (which will address the range of weeds in Schedule 4 of the *Biodiversity Conservation Act 2016* listed as Key Threatening Processes). The State Weeds Committee will liaise with regional weed committees on the effect of any changes following these reforms.

2.3 Biosecurity Act

The *Biosecurity Act 2015* has repealed the *Noxious Weeds Act 1993*, which has provided regulatory controls and powers to manage noxious weeds in NSW. The *Biosecurity Act 2015* streamlines and modernises the way weeds are managed in NSW as it:

- embeds the principle of shared responsibility for biosecurity risks (including weeds) across government, community and industry
- applies equally to all land in the state, regardless of whether it is publically or privately owned
- is premised on the concept of risk, so that weed management investment and response is appropriate to the risk
- supports regional planning and management for weeds, as recommended by the *Review of Weeds Management in NSW*.

In keeping with its premise that biosecurity is a shared community responsibility, the Act introduces the legally enforceable concept of a General Biosecurity Duty.

2.3.1 General Biosecurity Duty

For weeds, the General Biosecurity Duty (GBD) means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable).

“Dealing” has a broad definition in the Act and includes (but is not limited to) activities such as grazing, cropping, fodder production, horticulture, weed control, seed and other plant production, as well as carrying, sale and distribution of these products. In general if you deal with or carry plant matter as part of a commercial, professional, volunteer or recreational activity or lifestyle, it would be considered that you would know, or ought to know, the risks. Plant matter includes plants, parts of plants and seeds. Weeds are **not** limited to plants listed in the Appendices of this plan or to schedules in the Regulations of the *Biosecurity Act 2015*: any species that poses a biosecurity risk is subject to the GBD. This provides the Act with more flexibility to deal with both agricultural and environmental weeds, plants that may pose risks in particular contexts, and invasive species which are not as yet present, but pose a risk.

2.3.2 Regulatory tools of the Act

The *Biosecurity Act 2015* includes a number of mechanisms (regulatory tools) that can be used to manage weeds in NSW. These are outlined in Table 2.1 below. The *Biosecurity Act 2015* and Regulations provide specific legal requirements for high risk activities and state level priority weeds. The State level priority weeds and associated legal requirements relevant to the region are included in Appendix 1 together with the high risk priority weeds from the regional prioritisation process.

Table 2.1: Tools of the *Biosecurity Act 2015*.

<p>Prohibited Matter: biosecurity matter listed in Schedule 2, Part 1 of the <i>NSW Biosecurity Act 2015</i> for the purpose of preventing entry of that matter into NSW or a part of NSW. Prohibited matter relevant to the region is listed in Appendix A1.1 of this plan. Prohibited matter includes weeds nationally targeted for eradication and presently not in NSW.</p>
<p>Control Order: establishes one or more control zones and related measures to prevent, eliminate, minimise or manage a biosecurity risk or impact. Control orders are for managing weeds under approved eradication programs and last for five years (or can be renewed for longer-term eradication programs). Weed Control Orders (Part 6 Division 1) under the <i>NSW Biosecurity Act 2015</i> include weeds that are subject to a Control Order for the purpose of eradication. Control Orders will be proposed as needed to address eradication campaigns.</p>
<p>Biosecurity Zone: aims at containment of a species and provides for ongoing strategic management in a defined area of the state. A Biosecurity Zone specifies the measures that must be taken in the defined area to manage the weed. Species may also be subject to other measures tailored by the region either within the zone or outside it.</p>
<p>Mandatory Measures Regulation: requires parties to take specific actions with respect to weeds or carriers of weeds. Mandatory Measures are defined in the regulations and include prohibition on certain dealings - including Weeds of National Significance (WoNS) (Division 8 Clause 33), Parthenium weed carriers - machinery and equipment (Division 8 Clause 35), and duty to notify of importation of plants into the state (Division 8 Clause 34). Mandatory measures relevant to the region are listed in Appendix 1.</p>
<p>General Biosecurity Duty (GBD): the purpose of the GBD is to manage the spread and/or impact of all weeds that pose a biosecurity risk (2.3.1 above provides more detail). The GBD is in addition to any requirements included in a control order, biosecurity zone or other instrument made under the <i>Biosecurity Act 2015</i>. For priority weeds, outcomes to demonstrate compliance with the GBD are detailed in Appendix 1 of this plan.</p>

Biosecurity Direction: an Authorised Officer may issue a Biosecurity Direction to a person or class of persons, if the officer reasonably believes it is necessary for any of the following:

- to prevent, eliminate or minimise a biosecurity risk
- to prevent, manage or control a biosecurity impact
- to enforce any instrument under the *Biosecurity Act 2015*

Biosecurity Undertaking: is a written undertaking by a person, accepted by an authorised officer. It must specify the measures a person has agreed to implement to remedy a contravention, likely contravention, or suspected contravention of the Act and when those measures must be implemented by. It is not an admission of guilt.

Emergency Order: may be issued to respond to a current or imminent biosecurity risk that may have a significant impact.

2.3.3 Enforcing the Biosecurity Act

NSW Department of Primary Industries (DPI) administer the *Biosecurity Act 2015* and determine the weed species covered by regulatory tools such as Prohibited Matter, Control Orders and Biosecurity Zones.

Local Control Authorities (Local Councils and County Councils) are responsible for enforcing weed legislation. This includes such activities as:

- conducting weed inspections on public and private property
- inspecting and controlling weeds in high risk pathways and sites
- providing education, training and resources for both the public and staff in relation to weed management
- administering and ensuring compliance with any of the above regulatory tools
- responding to breaches of the Act, and
- notifying and reporting on weed activities to the Biosecurity Information System (BIS).

Authorised officers under the *Biosecurity Act 2015* are able to exercise all the functions specified in the Act to enforce the act and its regulations, including the regulatory tools covered in Table 2.1. Authorised officers are appointed by the Secretary of the Department of Industry or their delegate. Local Control Authority Weed Officers will be appointed as Authorised Officers under the *Biosecurity Act 2015* by their Local Control Authority. That appointment will allow the officers to exercise the functions of an authorised officer for weeds within the area of operation of their Local Control Authority.

The primary focus of this plan is to encourage and work with the community and landholders to achieve weed management objectives. Education, extension and use of biosecurity undertakings reinforce the concept of the General Biosecurity Duty and establish a cooperative approach to local and regional weed management.

Monitoring and compliance for weed management in the region will focus primarily on weeds listed in Appendix 1 to this plan. For these high risk weeds, prompt and responsible action is essential to avoid significant impacts on other landholders, industry and the environment.

Box 2.1: Agreed standards for weed management.

In terms of regulation the Regional Strategic Weed Management Plan plays an important role in articulating the shared responsibility principle of the *Biosecurity Act 2015* (the Act) and communicating weed control obligations. Although the plan is not a regulatory document in the traditional sense, it provides information to enable people to effectively discharge their obligations under the Act, including their general biosecurity duty.

The general biosecurity duty requires that all land managers and users ensure: *as far as is reasonably practicable, that the biosecurity risk is prevented, eliminated or minimised*. It does not prescribe how these outcomes are achieved. For this reason the plan does not include prescriptive measures for landholders and users to discharge their general biosecurity duty. The plan focuses on the outcomes to be achieved, allowing for different measures to achieve the same outcome.

While not technically a Regulation, the plan links the key elements of *Knowledge, Risk, Practicality and Outcomes* for discharging the GBD.

This plan therefore provides “evidence” of community expectations for weed control by land managers and of the need (through Weed Risk Management System and other evaluation processes) to manage particular weeds in certain ways.

It also provides enforcement authorities with the weed management outcomes for use in developing appropriate compliance instruments such as Biosecurity Undertakings and Biosecurity Directions when advice and education of land managers has not been able to achieve the expected community standard of weed management.

3. Weed management in the region

3.1 Regional overview

Sydney is Australia's largest city, the gateway to NSW, and is recognised as a high biosecurity risk including the risk of weeds establishing and spreading to and from the region. The region has more incoming international travelers and freight than anywhere else in the country along with a high density of small lot holders. With increasing disturbance as a result of urban development, along with the impacts of climate change, the risk associated with weeds continue to rise.

Much of Sydney's bushland and waterways are threatened by weeds and are under constant pressure from stormwater runoff with elevated nutrient loads. The combination of urban areas, intensive agriculture, and abandoned land awaiting development may support introduction of serious weed issues including Boneseed, Serrated Tussock, Chilean Needle Grass, African Olive, Alligator Weed, and various willow species,

The Greater Sydney Local Land Service region has a complex physical and social landscape. With a population of some 4.6 million people in an area of 12,474 square kilometres, the region extends from densely urbanised cities and coastal waterways through to rural lands and extensive World Heritage wilderness areas. It is the largest urban area in NSW and is also one of the fastest growing regions in the country, yet it retains outstanding natural values and important productive agricultural industries. With 80 national parks and seven state forests, almost 70 per cent of the region contains native vegetation.

The western escarpment of the Blue Mountains is dominated by over one million hectares of World Heritage and Wilderness listed National Parks. Many pockets within the World Heritage Area are pristine, with little to no impact from European settlement, providing a sanctuary for native wildlife and plants. The sandstone plateau to the north and south also include large reserved areas including the Royal and Ku-ring-gai Chase National Parks. By contrast the woodland communities of the clay basin (the Cumberland Plain) have been heavily cleared for urban development and agriculture, and very little of the remaining native vegetation is protected.

The forests, woodlands and wetlands of the Greater Sydney Local Land Services region are significant assets. In addition to their intrinsic value, social value and recreational value, these ecosystems provide drinking water supply to 4.6 million people and are the backbone of a multi-million dollar tourism economy.

The coastal area extends from Lake Macquarie in the north to Port Hacking in the south, and contains more than 100 ocean and estuarine beaches, providing popular destinations for tourism and recreational activities.

Tourism remains a vital part of the economy and is focussed on natural environment attractions including Sydney Harbour, coastal beaches and the Blue Mountains.

Other significant industries in the region include finance, business, extractive and manufacturing industries, property development, agriculture, commercial fishing, and recreation. Large urban areas place significant pressures on natural resources and there is a continuous need to maintain a balance between urban growth, the natural environment and agriculture.

3.2 Recent strategic weed management

Local Government

At the time of release of this plan there are 34 local Councils and 1 County Council operating in the Greater Sydney Local Land Services region.

Local Councils have a long tradition undertaking and refining systems of weed management from an operational perspective. This involvement has spread across their entire spectrum of open space and includes town centres, roadsides, parks, sports fields and bushland reserves. Councils are also directly involved in the regulation of weeds via their function as a Local Control Authority.

Local Councils hold significant biodiversity assets in the form of bushland remnants across the region. In addition to their biodiversity value these areas are highly used for their recreational and amenity value. Increasing urbanisation has led to impacts from stormwater run-off and weed invasion.

The industry of urban bush regeneration was pioneered within these Sydney Council reserves and without these management strategies, many reserves would be unlikely to hold the biodiversity value they do today. Many councils across Sydney established Bushcare programs in the 1980's, and these programs rapidly expanded throughout the 1980's and 1990's. Today these traditions continue stronger than ever, with Councils across NSW injecting up to \$30 million (LGSA, 2011) annually in undertaking weed management functions, including supporting around 900 Bushcare groups in the Greater Sydney region alone.

Hawkesbury River County Council (HRCC) is a single purpose Council, responsible for implementing the Noxious Weeds Act and the new *Biosecurity Act 2015* (as it relates to weed management) throughout the four local government areas of Blacktown, Hawkesbury, Penrith and the Hills Shire. The County Council model provides for coordinated strategic weed management across multiple local government areas and has been successfully operating in the region since 1948. HRCC has been the lead agency for the Sydney Region Weeds Action Program since 2012.

Weeds Action Program (WAP)

The NSW Weeds Action Program (WAP) is a NSW Government grant funding initiative to reduce the adverse impact of weeds. It is guided by the NSW Biosecurity Strategy 2013-2021 and the NSW Invasive Species Plan (ISP). The WAP is an outcomes-based program where grant funded activities clearly contribute to achieving the weed management goals of the ISP.

The program targets the highest risk weeds and supports activities that:

- prevent new weeds from establishing via inspections and surveillance,
- eliminate or prevent the spread of new weeds via control and follow-up monitoring,
- protect significant natural assets (endangered ecological communities, wetlands and major waterways) from invasive weeds through targeted control programs, and
- improve the capacity of NSW to identify and manage weeds through awareness and education that targets the weed management workforce and the broader community.

Approximately \$1 million is allocated to the Greater Sydney WAP project per year from the funding body, NSW DPI. As the Lead Agency for the Greater Sydney WAP project, Hawkesbury River County Council devolves grant funds to partner organisations (predominantly local councils) and coordinates project submissions and reports on behalf of the project partners.

Each partner contributes additional resources bringing the total annual expenditure to over \$2 million, all of which is focused on managing priority weeds on a regional scale.

For updates and information visit

<http://hrcc.nsw.gov.au/latest-newssydney-wap/> or <http://www.dpi.nsw.gov.au>

Sydney Weeds Committees (Subregional Weeds Committees)

For over 15 years, the four subregional weed committees (Sydney North, Sydney Central, Sydney South West, Sydney West Blue Mountains) have provided a forum for cooperation between local councils and state agencies and have resulted in a number of successful collaborative projects and ongoing weed management. Significant effort continues to be directed towards the eradication of new and emerging species and containment of other priority weeds.

Sydney Weeds Committees Incorporated was established in 2009 to consolidate administration of the subregional committees and to focus on strategic outcomes at a regional level. Funded through annual membership contributions (from local Councils) the Sydney Weeds Committees Incorporated has facilitated regional data collection, mapped the extent of priority weeds, and created numerous resources made available through its website sydneyweeds.org.au.

In 2013, as part of the WAP project, the Sydney Weeds Committees developed a suite of five strategic documents to help identify and address regional weed priorities. These are:

- Communication Strategy,
- High Risk Pathways and Site Management Plan,
- Inspection Plan,
- Weed Incursion Plan, and
- Rapid Response Plan

Office of Environment and Heritage and National Parks and Wildlife Service

The Office of Environment and Heritage (OEH) works with the community to care for and protect NSW's environment and heritage, which includes the natural environment, Aboriginal country, culture and heritage, and built heritage. OEH supports the community, business and government in protecting, strengthening and making the most of a healthy environment and economy in NSW.

The National Parks and Wildlife Service (NPWS – part of OEH) manages more than 80 NSW national parks and reserves and over 575,000 hectares of land, or around 46 per cent of the land area in the Greater Sydney Local Land Services region.

NPWS weed management priorities and programs are documented in the Regional Pest Management Strategies (RPMS) 2012-2017. These aim to manage weeds and pest animals in national parks and reserves across NSW by minimising the adverse impacts of pests on biodiversity, protected areas and the community by identifying the highest priority programs and focusing on these, ensuring that actions are achievable, and delivering measurable outcomes. They recognise that pest/weed species are a problem across the landscape. Programs are developed and often carried out in collaboration with neighbours and other stakeholders. Most relevant to the Greater Sydney Local Land Services region are the Metropolitan North East, Metropolitan South West, and parts of Central Coast Hunter, Blue Mountains and South Coast RPMS.

NPWS Regional Pest Management Strategies 2012-2017 are due for review in 2017. The RPMS will be informed by the Regional Strategic Weed Management Plan priority weed lists and control obligations and by Saving Our Species, Biodiversity Priorities for Widespread Weeds, and Threat Abatement Plans.

Biodiversity Priorities for Widespread Weeds

Many weeds that threaten biodiversity are widespread and usually beyond the scope of prevention and eradication programs developed to deal with new and emerging weed threats.

The Biodiversity Priorities for Widespread Weeds was a joint project between NSW Department of Primary Industries (NSW DPI), NSW Office of Environment and Heritage (OEH) and the former Catchment Management Authorities. It uses an adapted Threat Abatement Plan (site-led) approach to identify and prioritise widespread weeds impacting on biological assets and sites for weed control within each former Catchment Management Authority region in New South Wales. Weed management within this project is guided by a state-wide framework and a specific publication for each Catchment Management Authority.

The Biodiversity Priorities for Widespread Weeds (NSW DPI and OEH 2011) provides a complimentary decision-making option for widespread weeds where they are impacting on environmental assets.

3.3 Community involvement

Bushcare programs began in the suburbs across Sydney in the 1980s and have now grown to become a national movement of volunteers working to restore the natural environment in urban and coastal areas across Australia. This environmental volunteer work occurs mostly on public land: in bushland, wetlands and around waterways managed by local councils or NSW government agencies.

Environmental volunteering programs such as Bushcare and Landcare have steadily grown since their inception. Greater Sydney has around 1100 groups working on ground through Bushcare Landcare and Friends of Groups. These groups contribute around 178,000 volunteer hours annually, and bring plant knowledge, skills, experience and a passion for the environment.

While the focus of these groups is predominately on bushland management, there are also groups looking at sustainable agriculture, equine landcare and water quality. Greater Sydney is also host to a range of Adventure Landcare groups who travel into remote locations to manage weeds and protect the wilderness areas that surround Sydney.

Bushcare and Landcare groups are now an accepted and successful partnership between many government land management organisations and community members. The largest contribution by volunteers to OEH (ie in National Parks) is weed management.

Opportunities exist to enhance the network of community volunteers focussing on weed management via the growth in corporate volunteer programs as well as population growth in peri-urban areas.

4. Weed Risk - Assessment and Prioritisation

4.1 Weed management prioritisation

To ensure limited resources are used to best effect, and that management of weeds is commensurate with the risk posed by each species, an objective and repeatable risk assessment was undertaken across the region. This section outlines the principles and assessment processes used to prioritise weed management.

The generalised Weed Invasion Curve (Figure 4.1) illustrates the invasion process for weeds from arrival to widespread establishment (after Chippendale (1991); Hobbs and Humphries (1995); and Environmental Weeds Working Group (2007)) and shows that the effort and resources required to control a weed rise with time and area occupied. Managing weeds earlier rather than later is more effective. This principle is a foundation of the process used to develop the regional weed priority list in this plan (Appendix 1.1). The asset protection phase shown in Figure 4.1 illustrates an important shift in the focus from controlling a weed species, to limiting the impact it may have on important assets.

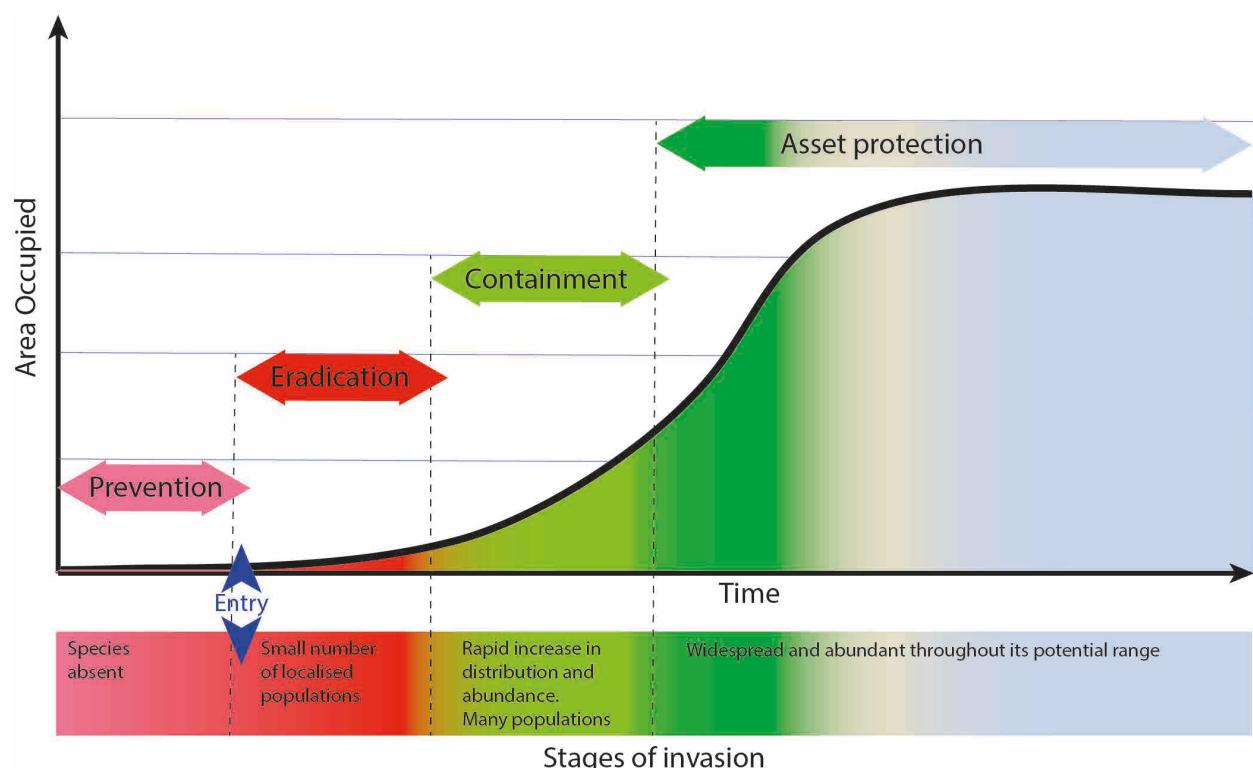


Figure 4.1: Weed invasion curve illustrating area infested and resources required for control over time, and the basis of management objectives.

4.1.1 NSW Weed Risk Management system

The NSW Weed Risk Management (WRM) system provides a standard, nationally accepted and transparent process to help make decisions about prioritising weed species and determining appropriate management responses. The Weed Risk Management system considers two components for prioritising weeds for management action:

1. A weed risk assessment
2. An assessment of the feasibility of coordinated control

Weed risk is determined through scoring a series of parameters (invasiveness, impacts, potential distribution) and likewise a score for feasibility of co-ordinated control (control costs, persistence, and current distribution). An assessment of these components provides a management objective that reflects the principles of effective weed management, and links with the objectives of the *Biosecurity Act 2015*.

4.2 Regional prioritisation process

A regional weed prioritisation process was undertaken using the NSW WRM system. This was carried out using an expert regional panel on behalf of the Greater Sydney Regional Weed Committee. The panel brought together practitioners with long term on-ground experience with high priority species, including local experts previously involved in the weed advisory committees.

Weed Risk Management system assessments were undertaken at the regional scale to ensure that the outcome reflected regional conditions. Where there was significant sub regional variation in weed risk and/or weed distribution, these assessments were conducted at a sub-regional level to determine if a different management response was warranted for the sub regional area.

Quality assurance was undertaken by the Technical Subcommittee of the State Weeds Committee. The Technical Subcommittee reviewed the weed risk management assessments, management categorisation and objectives, and the outcomes to demonstrate compliance with the General Biosecurity Duty developed for the region. This ensured consistency and alignment with the Weed Risk Management system and the *Biosecurity Act 2015*. The Technical Subcommittee also provided guidance to regional weed committees on appropriate outcomes to demonstrate compliance with the General Biosecurity Duty. The management categories used in the assessment are summarised in Table 4.1.

Table 4.1: Regional weed management categories

Category	Objective	Characteristics of weeds in this category
Prevention	To prevent the weed species arriving and establishing in the Region.	These species are not known to be present in the region. They have a high to very high weed risk (highly invasive and high threat) and have a high likelihood of arriving in the region due to potential distribution and/ or an existing high risk pathway.
Eradication	To permanently remove the species and its propagules from the Region. OR to destroy infestations to reduce the extent of the weed in the region with the aim of local eradication.	These species are present in the region to a limited extent only and the risk of re-invasion is either minimal or can be easily managed. They have a high to very high weed risk and high feasibility of coordinated control.
Containment	To prevent the ongoing spread of the species in all or part of the Region.	These species have a limited distribution in the region. Regional containment strategies aim to prevent spread of the weed from an invaded part of the region (core infestation), and/or exclude the weed from an uninvaded part of the region (exclusion zone).
Asset Protection	To prevent the spread of weeds to key sites/ assets of high economic, environmental and social value, or to reduce their impact on these sites if spread has already occurred.	These weed species are widespread and unlikely to be eradicated or contained within the wider regional context. Effort is focussed on reducing weed threats to protect priority high value assets.

4.4.1 Priority weed list for the region

The regional prioritisation process identified priority high risk weeds and developed a regional priority weed list (Appendix 1.2). This identifies outcomes to demonstrate compliance with the General Biosecurity Duty for listed species. State level priorities (Appendix 1.1) were determined by the Department of Primary Industries. Management requirements for weeds, whether that be specific regulatory measures (state level priorities) or outcomes to demonstrate compliance with the General Biosecurity Duty (regional priority weeds), are also detailed in Appendix 1.

The outcomes applied to a particular weed depend on factors such as the biology and ecology of the weed, the land use(s) in which it occurs, the distribution in the region and size of the infestation, potential pathways for infestation and others. These factors were taken into account in determining the suite of outcomes to demonstrate compliance with the General Biosecurity Duty and strategic responses. As with all components of this plan, these obligations apply to all private and public landholders in the region. Monitoring and compliance for weed management in the region will focus primarily on weeds listed in Appendix 1.

4.4.2 Other regional weeds of concern list

The community is also interested in management of widespread weeds because of their extent and impact in sub-regional locations. Appendix 2 outlines other priority weeds identified by the committee in consultation with the community. These are species for which a consistent and/or collaborative approach to management will provide the best outcome across the region. Weeds identified within Appendix 2 are also subject to the General Biosecurity Duty and may be a focus for local management plans and coordinated campaigns by the community and other stakeholder groups in the region.

Both the regional priority weed list (Appendix 1) and the additional regional weed list (Appendix 2) may be amended as necessary in accordance with the process outlined in this section. New weed species will be considered on a needs basis provided adequate information is received to undertake a weed risk assessment. For example, photograph of plant, location and extent of infestation.

5. Actions

5.1 Overview

This section covers actions required to achieve our goals. In essence, Goal 1 addresses community capacity to discharge the General Biosecurity Duty, Goals 2 and 3 are focussed on weed management outcomes, while goal 4 focus on coordinating successful regional weed management.

Strategies, actions and associated regional measures of performance (see 5.3), are based on the best available information and science relevant to weed biosecurity. Strategies and actions for each goal are presented in Table 5.1 below.

Table 5.1: Goals, Strategies and Actions of the plan

Goal 1: Responsibility for weed biosecurity is shared by all people of the Greater Sydney region, including organisations and businesses	
Strategies	Actions
1.1 Promote weed management and behavioural change in the community	<p>1.1.1 Develop and implement a strategic marketing and communication plan that promotes delivery of weed management in the Greater Sydney region.</p> <p>1.1.2 Develop products promoting behavioural change and the profile of weed management in the Greater Sydney region, including promotional campaigns and events, sponsorship, media releases, social media, web sites, e-newsletters, brochures and other publications.</p>
1.2. Build stronger partnerships that support weed management	<p>1.2.1 Develop partnerships that support tenure neutral weed management.</p> <p>1.2.2 Foster networks, alliances and aboriginal engagement that support communities and stakeholders in weed management activities.</p> <p>1.2.3 Develop and implement mechanisms to protect biodiversity and support management of weeds on non-productive land.</p>
1.3 Enhance community-wide capacity in sharing responsibility for weed management	<p>1.3.1 Develop, promote and assist with interpretation of information outlining stakeholder roles, obligations and implications in weed management.</p> <p>1.3.2 Enhance existing communication networks to increase effective dissemination of information and understanding of shared responsibility and a whole of community approach to weed management.</p> <p>1.3.3 Provide greater opportunities for education, training and community based programs that increase community capacity to manage priority weeds.</p>

Goal 2: Weed biosecurity supports profitable, productive and sustainable primary industries and

Goal 3: Weed biosecurity supports healthy, diverse and connected natural environments

Strategies	Actions
2-3.1 Improve surveillance, reporting and tracing systems for weeds	<p>2-3.1.1 Improve surveillance, reporting and tracing for weeds:</p> <ul style="list-style-type: none"> • Widen implementation of early detection by encouraging partners to become involved in the High Risk Pathways and Sites inspection program and report via BIS • Develop tools, systems and services (e.g. drones) to allow for efficient weed mapping • Build community capacity to assist with surveillance and reporting • Undertake coordinated surveillance activities for high risk species. <p>2-3.1.2 Support state-wide processes in development of more efficient ways of demonstrating proof of freedom from weeds.</p>
2-3.2 Improve prevention, preparedness and response to weed emergencies	<p>2-3.2.1 Improve cross-jurisdictional collaboration on consistent and effective approaches to preventing establishment of new weed species.</p> <p>2-3.2.2 Manage high risk pathways, using strategic intentional surveillance, region-wide and consistent industry codes, education and enforcement mechanisms.</p> <p>2-3.2.3 Improve prevention and response to weed biosecurity emergencies through improved identification processes, improved communication and reporting networks, and rapid responses to management of new high priority weeds,.</p>
2-3.3 Eradicate or prevent the spread of new weeds	<p>2-3.3.1 Develop standardised and consistent planning for:</p> <ul style="list-style-type: none"> • Weeds listed in Appendix 1 to this plan • New weed incursions, including rapid response plans and associated cost sharing arrangements • Weed control and management protocols for hazard reduction and other fire management <p>2-3.3.2 Work with other jurisdictions to standardise weed biosecurity arrangements across regional and state borders.</p> <p>2-3.3.3 Ensure management occurs for high priority weeds in alignment with State, Regional or Sub-regional objectives.</p>
2-3.4 Contain and manage impacts of widespread weeds	<p>2-3.4.1 Develop and promote best practice guidelines to minimise the spread and reduce the impacts of established weeds.</p> <p>2-3.4.2 Support the ongoing development and coordination of new and existing cooperative programs for reducing or controlling the current extent of widespread weeds in priority sites.</p> <p>2-3.4.3 Actively manage high priority weeds and widespread weeds which threaten key sites/assets in alignment with State, Regional or Sub-regional objectives.</p> <p>2-3.4.4 Continue to contribute to new and existing state and national arrangements for managing established weeds.</p>
2-3.5. Support and utilise developments in weed science and technology	<p>2-3.5.1 Document invasive weed species research priorities in collaboration with government, industry, research providers, the aboriginal community, and the wider community and report these to the State Weeds Committee.</p> <p>2-3.5.2 Strengthen research partnerships and actively participate in the development of new technologies and innovative approaches to weed management.</p>

Goal 2: Weed biosecurity supports profitable, productive and sustainable primary industries and	
Goal 3: Weed biosecurity supports healthy, diverse and connected natural environments	
Strategies	Actions
2-3.6 Use results of research to assess and respond to changing risks under a changing climate	<p>2-3.6.1 Use predictive modelling (e.g. Weed Futures, BioClim, ANUclim) to identify the likely weed species and the environmental, social and economic values that will be vulnerable to invasive weeds under a changing climate.</p> <p>2-3.6.2 Implement actions that promote resilience and minimise the risk of high risk invasive weeds under a changing climate.</p>

Goal 4: Weed biosecurity is supported by coordinated, collaborative and innovative leadership	
Strategies	Actions
4.1 Provide governance and leadership that supports collaborative, effective and efficient weed management	<p>4.1.1 Work in a collaborative partnership with the Greater Sydney Regional Weed Committee to implement this plan.</p> <p>4.1.2 Support the functions and business needs of the State Weeds Committee.</p> <p>4.1.3 Support a coordinated regional approach to strategic and investment planning; monitoring, performance evaluation and reporting; weed risk assessment review, and weed emergency management preparation, response and recovery processes.</p>
4.2 Adopt adaptive, effective, and collaborative planning and processes	<p>4.2.1 Develop the components of the Regional Business Planning Framework that underpins the implementation of this plan.</p> <p>4.2.2 Work with stakeholders to develop and update local implementation plans using best available standards, local knowledge, research and technology, as required.</p> <p>4.2.3 Review and update existing Regional and Sub-regional weed risk assessments where and when required.</p> <p>4.2.4 Share information with other jurisdictions and regions on approach, progress and innovation with weed management.</p>
4.3 Develop a regional invasive weed knowledge base and information system that supports state standards	<p>4.3.1 Support the continuing development of the Biosecurity Information System to collect standardised regional data (including weed mapping) capture, storage, record keeping and retrieval processes.</p> <p>4.3.2 Encourage wider use of the Biosecurity Information System to improve weed distribution and impacts data and management information.</p> <p>4.3.3 Ensure that weed information and research data are readily available to stakeholders for use in weed management and planning.</p>
4.4 Develop consistent systems for monitoring, evaluating and reporting on the effectiveness of weed management	<p>4.4.1 Develop and implement indicators that assess the performance of this plan and progress towards achieving strategic outcomes.</p> <p>4.4.2 Develop and implement standard local monitoring and reporting protocols that support region and state-wide needs.</p> <p>4.4.3 Use the information collected from research, local MERI programs and the BIS to inform an adaptive management approach to Greater Sydney weed management projects, plans, programs, policies and reforms.</p>

6 Implementation

This chapter covers governance for this plan and how the plan will be implemented. It includes guiding principles for weed management planning and implementation and roles and responsibilities for stakeholders and customers in implementing this plan.

6.1 Governance

This plan has been approved by the Board of Greater Sydney Local Land Services, after review by the Biosecurity and Emergency Response Sub-committee of the board. This sub-committee will maintain oversight of this plan during its implementation phase and will assess its performance against specified performance measures, once developed. Where it identifies issues of concern or opportunities for improvement it will refer these to the Greater Sydney Regional Weeds Committee through its chair for consideration.

This plan operates under the Greater Sydney Local Land Services Local Strategic Plan and will be implemented in collaboration with key stakeholders, the community, investors and Greater Sydney Local Land Services. Collaboration and building capacity of land managers is central to plan implementation. By working collaboratively and engaging with all sectors – public, private, non-profit, individuals and community groups – effective and lasting solutions to shared problems can go beyond what any sector can achieve on its own.

6.1.1 Local Land Services and the regional weed committee

Collaboration and building capacity of land managers is central to the successful implementation of this plan. By working collaboratively and engaging with all sectors – public, private, non-profit, individuals and community groups – effective and lasting solutions to shared problems can go beyond what any sector can achieve on its own. The Greater Sydney Regional Weed Committee and its member organisations will facilitate implementation of this plan with executive support from Greater Sydney Local Land Services and overarching guidance from the local board.

In implementing the plan the committee will work with Local Land Services to:

- advise the State Weeds Committee on weed priorities and other strategic matters in the region and seek their advice relating to weed listings, cross jurisdictional and other matters
- liaise with neighbouring regional weed committees, especially with respect to any significant incursions and potential movement of priority weeds from one region to another
- promote weed policy, risk assessments, declarations, best practice and control outcomes to member organisations and the community
- oversee the implementation of the plan on a region-wide perspective, using committee expertise and best available knowledge, research and technology
- facilitate regional communication, education, training and awareness programs that promote plan outcomes
- promote effective co-ordination of weed management across agencies and tenure, including appropriate resource and information sharing between member organisations
- identify synergies from collaboration and opportunities for funding and priority project delivery
- identify information and research needs and appropriate collaborative actions

- oversee measurement and evaluation of weed control activities in the region to inform management actions and planning
- monitor, evaluate and report on outcomes of collaborative planning and delivery processes.

6.1.2 Guiding principles for implementation

The following principles will be used to guide weed management planning and implementation and are consistent with the weed reforms and leading practice.

- Effective stakeholder collaboration and shared responsibility are essential to effective weed management.
- Behavioural change and increasing community capacity are important to effective weed management.
- Prevention and early intervention are the most effective weed management tools.
- Causes of weed invasion and spread are managed wherever possible, not just the symptoms.
- The biology and ecological requirements of weeds, including mechanisms and pathways for spread are considered in weed management.
- Innovation in weed control and management is encouraged.
- Regular monitoring, evaluation and improvement are incorporated in weed management programs.
- Weed management is an integral part of land management. Land management practices and the timing of management actions are critical to the prevention and reduction in spread and impact of weeds.
- Weeds are managed in a strategic and co-ordinated manner across the landscape. Assessing and managing weed risk at a landscape and multi species scale (where appropriate) can lead to significant efficiencies in use of resources and achievement of strategic outcomes.
- The best available science, expertise and tools are utilised in weed management decision making.

The investment principles of the Greater Sydney Local Land Services Local Strategic Plan, detailed in page 47 of that plan, provide additional guidance on governance and overall implementation of this plan.

6.2 Processes supporting implementation

A range of plans and processes will support implementation of this plan as outlined in Box 6.1. Greater Sydney Local Land Services will work with the Regional Weed Committee in the development of these processes in the region.

A key element of this plan is collaborative and coordinated weed management across tenures. This will require policies, processes and procedures for collaborative planning and action to enable member organisations and key stakeholders to translate this plan into local area priorities, actions, collaboration and partnerships that integrate weed management across both tenures and stakeholders.

Box 6.1 Business plans and processes that support delivery of the plan.

- Greater Sydney Regional Weed Committee coordination - to ensure clear stakeholder roles and responsibilities and good governance. May also cover delivery of business planning components, including the review and update of weed risk assessments as required.
- Local implementation roles and responsibilities - to ensure clear roles and responsibilities and consistency in the delivery of local weed management.
- Processes for integrating regional delivery and projects - to ensure efficient and effective delivery.
- Compliance planning - to support an integrated and consistent approach to meeting regulatory obligations across the region.
- High risk weed incursion planning - to address surveillance and identification of new weed incursions and coordination of regional responses.
- Rapid response planning - to address procedures, responsibilities and actions for response to a new incursion.
- Local control authority planning - to ensure that compliance strategies, standards and service agreements are consistent with this plan and to provide a consistent policy and procedural framework for inspections and enforcement under the *Biosecurity Act 2015*.
- State Guidelines and best practice codes - to support consistency in approach and the capacity to inform state-wide reporting.
- Communication and marketing - to develop a strategic approach to communicating key messages and engaging partners, stakeholders and the broader community.
- Key performance indicator development - to support assessment of this plan's performance measures.
- Monitoring, evaluation, reporting & improvement coordination - to support consistent approaches that allow for reporting at local, regional and state scales.
- Research and development collaboration – to support a collaborative approach to addressing research needs in the region.
- Investment planning – to support an integrated approach to investment in priorities for weed management in the region.
- Procedures for review of weed listings in the plan. Responsibility for amendments to state determined priorities rest with NSW DPI and the State Weeds Committee. The committee will raise any identified issues with changes to listings for state determined priorities via the State Weeds Committee to ensure consistency and alignment.

6.3 Delivery Partners

Delivery partners have an interest in delivery of priority actions. This interest spans from being involved in refining priority actions, to further developing processes to address actions, through to participating in their delivery. Broad roles and responsibilities are determined, and responsibilities for specific actions will be agreed following plan approval. As implementation progresses and opportunities for new partnerships emerge, new partners may also become involved.

Resourcing of weed management is unpredictable and will fluctuate, and partners also differ in their capacity to deliver weed management resources. Commitments from partners improve community confidence in action implementation. It is recognised that commitments and capacity may be contingent upon availability of resources at a given point in time.

6.3.1 Lead organisations

Lead organisations will take responsibility for the delivery of actions and performance measures within this plan and will manage and coordinate implementation of components of the plan and associated programs. This will ensure clear responsibilities for plan implementation and will be finalised following plan approval through development of relevant business planning components. Partners will take primary responsibility within their respective areas in the delivery of actions and performance measures. Other government agencies, industry and community will also play a role in implementing this plan to varying degrees.

6.3.2 Stakeholder roles and responsibilities

A wide range of stakeholders and customers are involved in weed management in the region. This plan recognises the roles of all levels of government, industry, community and community organisations. This plan aims to consolidate these efforts through better coordination and communication between organisations and individuals in the region.

Commonwealth government

The Commonwealth government has a role in preventing new weed incursions at national borders (quarantine), in education, research and development, in funding, and national legislation. National agreements outline the roles and responsibilities of government and industry, in responding to emergency plant, pest and disease incidents, and detail how those responses will be funded. These agreements include the Intergovernmental Agreement on Biosecurity, Emergency Plant Pest Response Deed and the National Environmental Biosecurity Response Agreement.

State government

State government leads the development of policies, strategies and legislation that promote a comprehensive and responsive weed biosecurity system across NSW. The Department of Primary Industries (NSW DPI) is the lead agency for weed management within the NSW Government, with support by the Office of Environment and Heritage (NSW OEH) in relation to environmental weed management.

Key roles and responsibilities for these two agencies include:

- Administration of key legislation relating to priority weeds (*Biosecurity Act 2015* – NSW DPI and *Biodiversity Conservation Act 2016* – OEH).
- Increasing awareness of weeds in industry, key stakeholders and the community.
- Leading and coordinating prevention, preparedness, response and recovery for weed emergencies.
- Developing non-regulatory approaches and incentives to underpin weed management.
- Coordinating diagnostic, surveillance, tracing and monitoring systems for priority species.
- Conducting weed research in priority areas and collaborating with universities and research providers on priority research initiatives and pest and weed identification.
- Coordinating the delivery of leading practice solutions for weed managers across the state.

NSW Department of Primary Industries

The NSW Department of Primary Industries leads and coordinates the prevention, preparedness, response and recovery for weed emergencies. This agency also develops and maintains regulatory mechanisms that support weed programs.

Office of Environment and Heritage and National Parks and Wildlife Service

The Office of Environment and Heritage is responsible for managing more than 850 national parks and reserves (see further below). OEH also leads state-wide initiatives to reduce the impacts of invasive species on biodiversity. The Saving our Species program provides for the conservation of threatened taxa across all land tenures under the *Biodiversity Conservation Act 2016*.

The National Parks and Wildlife Service (NPWS – part of OEH) is responsible for managing over 7 million hectares of land in NSW. As a public land manager, NPWS works with a range of stakeholders to proactively and strategically manage weeds. NPWS is guided by Regional Pest Management Strategies that identify weed management priorities and programs for implementation on all lands managed by NPWS. The strategies aim to minimise the adverse impacts of pests and weeds on biodiversity, protected areas and the community by identifying the highest priority programs and focusing on these, ensuring that actions are achievable, and delivering measurable outcomes. The strategies also demonstrate NPWS responsibilities in delivering the NSW Biosecurity Strategy 2013-2021.

NSW Department of Industry - Lands

The Department of Industry - Lands is a business unit of the NSW Department of Industry and administers and manages Crown land, which makes up approximately half the state. The majority of this Crown land (96%) is held under Western land leases, vital for agriculture and grazing. The remaining Crown land (4%) is made up of roads, reserves and land held in every community and part of the State. This includes rivers, estuaries, beaches, waterways and seabeds. The NSW Department of Industry – Lands develops, funds and implements invasive species management strategies on land under its direct control and supports activities undertaken by community groups, reserve trusts, lessees and others that manage land on its behalf, including Councils.

Department of Industry-Lands incorporates a multi-pronged risk-based approach to managing invasive species on Crown land, including education, extension, project implementation, audit and compliance activities. Department of Industry - Lands is always keen to work in partnership with other stakeholders and agencies to ensure optimal outcomes in the management of invasive species on Crown land.

Greater Sydney Local Land Services

Greater Sydney Local Land Services works with local and state government organisations, land managers and the community to:

- deliver regional strategic weed management plans
- facilitate and coordinate regional strategic weed planning, and
- assist with education and community outreach programs.

To assist with strategic planning and coordination of weed management in the Greater Sydney region, a Regional Weed Committee has been established, and is supported by Greater Sydney Local Land Services.

Local government

Local government plays a significant role in biosecurity, particularly in weed management. It has an important role to play in engaging local communities, managing public lands and assisting with emergency management. Local government also makes a significant investment in local and regional weed management and is responsible for implementing the *Biosecurity Act 2015*, as it relates to weeds within their council area. Weed control functions of local government are undertaken by:

Local Control Authorities

Local Control Authorities, including local councils and county councils. Sometimes, adjoining councils form County Councils to pool resources. County councils provide weed control over a larger area and are funded by member councils.

Local Control Authorities have the power to appoint inspectors who have the authority to issue weed notices and fine landowners not complying with a Control Order, Biosecurity Direction, or other direction issued by the Minister. Their role in recent years has seen a growing trend toward community education and capacity building. Inspectors will often use the techniques of guiding and teaching landholders about how to best manage their weeds. The aim is to still achieve compliance with the Act, but for this to be done in a voluntary capacity.

Local control authorities have a major role and responsibility for the implementation of this plan and for priority weed control including:

- enforcing legislated weed management obligations on private and public land (apart from federal public authorities)
- delivering components of the Weeds Action Program throughout the state
- conducting weed inspections on public and private land
- controlling weeds on lands managed by local government
- reporting and mapping weed incidence across the state
- input into weed strategy and policy
- providing education, training and resources for both the public and for staff
- cooperating with their neighbours and region to ensure control of certain weeds.

Other managers of state owned land including linear reserves

A number of organisations and government agencies manage state owned land allocated for specific purposes. These include travelling stock reserves (TSRs, managed by Local Land Services), state forest (Forestry Corporation of NSW, a state owned corporation), state infrastructure such as road and rail corridors (Roads and Maritime Services and Transport NSW), corridors for energy infrastructure, Water NSW, Crown roads as well as both tidal and non-tidal Crown waterways (NSW Department of Industry – Lands).

The spread of weeds along natural and artificial corridors - roadside verges, railways, utilities (transmission lines, gas pipelines etc), waterways, recreational trails and drainage lines – is a significant avenue for increasing weed distribution throughout the region. A key area of concern is the spread of weeds along road and rail corridors, and transmission lines where they can easily move within and between regions providing a source of infestation for neighbouring properties. Another major concern is infestations of aquatic weeds upstream of water storage assets (i.e. dams) providing an ongoing source of re-infestation in the storages.

All land managers have an important role in the management of weeds in the region, including the development and implementation of management strategies and the education of the community and other stakeholders.

Aboriginal land managers (Local Aboriginal Land Councils)

Collectively, Local Aboriginal Land Councils are a major land owner in the Greater Sydney region and like all landowners have a direct responsibility for weed control on their lands.

Aboriginal people have a connection to their respective country that provides the foundation of personal identity and a belonging culture to that country, and brings with it a responsibility to care for their lands, and its environments. This includes the control of introduced weeds into their country, and particularly around culturally significant sites and places belonging to the original peoples of the areas.

Local Aboriginal communities have a similar role to other community organisations in managing weeds on their land, but have additional cultural factors which influence land management. Aboriginal traditional owners have obligations under traditional law and custom to care for Country, as well as obligations as land owners and managers. This may result in Aboriginal people having priorities for weed management to address threats to cultural sites, indigenous plants and animals or other important cultural resources (OEH, 2016).

Aboriginal land management techniques such as cultural burning are increasingly being seen as an effective way to manage natural areas, by controlling weeds and improving the condition and resilience of native vegetation and habitats.

Aboriginal staff in agencies such as Local Land Services and National Parks and Wildlife Services provide management advice to community groups such as Bushcare and Landcare when undertaking weed control work around Aboriginal Cultural heritage sites.

Throughout the region there are a number of different types of land ownership and management by Aboriginal people. Indigenous Land Use Agreements help clarify obligations of public land managers where Native Title is recognised over the land they manage (OEH, 2016). For example, Aboriginal people are involved in co-managing parts of the Greater Blue Mountains World Heritage Area, including all activities related to weed control and other land management.

Industry

Industry roles in weed management include:

- Implementing and developing industry standards, guidelines and codes of practice.
- Communicating and educating the supply chain to manage the risk of introducing and knowingly distributing weeds.
- Contributing to research programs in priority areas.
- Participation in biosecurity response agreements and cost-sharing arrangements.
- Managing weeds on land and water used for production, promotion, distribution and sale.
- Managing risks when trading in potential or known weed species used for, or held by, nurseries, pet shops and aquariums (water weeds), collectors, agriculture, horticulture, aquaculture and biofuels etc.
- Preventing the establishment of weeds, through movement of goods, produce and equipment or related activities such as the disposal of ships' ballast.
- Reducing the spread of known weeds in the landscapes they manage.

Nursery and garden industry

The production and retail gardening industry together with the landscape supply chain is an important partner in minimising the impact of invasive garden plants. Many consumers seek advice from their garden retailer or landscape designer/contractor and the point of sale is an ideal opportunity to influence the plant purchasing decision. Research has indicated that when consumers are aware of potential weediness they are quite willing to accept safer plant alternatives.

Some things that garden retailers and landscape supply chain can do to assist in minimising the impact of weeds include:

- know what plants are identified in this plan as high priority weeds (Appendix 1)
- check with the local council for information on local garden escapees
- seek safer alternative plants from production nurseries for purchase
- do not sell or plant plants that are identified as potentially weedy in your area and proactively offer customers low invasive plant alternatives

Urban development/Housing industry

The population of Sydney is expected to grow to 9.9 million by 2036. Much of this growth will be accommodated in newly developed areas to the southwest and northwest of the region. The rapidly increasing rate of development increases the risk of weeds spreading via movement of soil, equipment, machinery, or construction materials. The building industry has a responsibility to use proper equipment hygiene and spread prevention measures to mitigate weed impacts.

Community groups, volunteers and individuals

Community groups and volunteers play an important role in the management of weeds in the region by enlisting support and providing on-ground weed control. This includes non-government organisations such as Landcare, Conservation Volunteers, Greening Australia and Bushcare. Activities undertaken by these groups include weed removal and monitoring activities, bush regeneration, biodiversity conservation projects and rehabilitation of aquatic habitats on private and public lands. Building on this foundation is essential in sharing responsibility for weed management.

The contribution made by these groups is significant. As an example, the Landcare network is one of the larger, more organised community partners involved in regional weed-related issues. The regional network in Greater Sydney includes around 1000 Landcare groups, including approximately 900 Bushcare groups and 10,000 volunteers, contributing 90,000 volunteer hours annually and actively involved in weed management on private and public land.

The Nature Conservation Council of NSW was established in 1955 and represents more than 150 community organisations with a combined membership of over 60,000 individuals. In this regard, the Nature Conservation Council of NSW facilitates information flow to and from its member organisations.

Community groups and volunteers support community engagement and assist in hands on weed management. This includes leading volunteer groups that undertake weed removal and monitoring activities, bush regeneration, biodiversity conservation projects and rehabilitation of aquatic habitats on private and public lands. Building on this foundation to share in responsibilities for weed management, is essential.

Individual community members also have an important role to play in helping to minimise the impacts of weeds in the region. The community provides much needed “eyes and ears” to detect and report new incursions and support eradication. The community also provides crucial support to the actions of responsible authorities, land managers and external funding programs. Likewise programs that build resilience in the natural environment and help reduce the risks from pests, diseases and weeds rely on community participation.

Private land owners and occupiers have roles to play in the ongoing management of established weeds on their own land and in collaboration with their neighbours and the surrounding community.

State Weeds Committee

The State Weeds Committee is responsible for ensuring a coordinated and strategic approach to weed management at the state level. The committee is an advisory committee to the Minister for Primary Industries and includes members from state agencies and Local Government.

The State Weeds Committee is responsible for:

- ensuring regional weed committees operate on a tenure-neutral basis and implement regional strategic weed management plans that are effective, risk-based and inclusive of all major stakeholders in the landscape
- evaluating weed declarations, based on potential long-term risks and impacts to the economy, environment and community
- evaluating the effectiveness of weed management programs, and
- establishing a high-risk incursion fund.

Sydney Weeds Committees (Subregional Weeds Committees)

Four Subregional Weeds Committees operate within the Greater Sydney Local Land Services region and comprise Weeds Officers from local councils and state agencies, for example NPWS and Dol-Lands, operating in the subregion.

The subregional committees provide a forum for information sharing, networking and collaboration, and aim to:

- promote a cooperative and coordinated approach to weed management in the region
- increase awareness of weeds with industry, private landholders and the community, and
- assist with understanding and implementing changes as a result of new biosecurity legislation.

The chair and deputy chair from each subregional committee form the executive of an incorporated association, Sydney Weeds Committees Incorporated. Funded through annual membership fees, Sydney Weeds Committees Incorporated employs an Executive Officer to help facilitate, support and administer the subregional committees. The chair of each subregional committee is also represented on the Regional Weed Committee.

All land occupiers

All members of the community have an important role to play to help minimise the impacts of weeds. We can all be effective “eyes and ears” to detect and report new incursions, and eradication attempts need community support to be successful. Land owners, occupiers and the public in general also have roles to play in the ongoing management of established weeds on their own land and in collaboration with their neighbours and community.

6.4 Investment

In its 2014 report *Weeds – Time to get serious*, the Natural Resources Commission stated that “Long-term funding is essential to ensure that investments, particularly investments in reducing the impacts of widespread weeds, are not wasted.”

This plan should provide all stakeholders in weeds and those dealing with biosecurity matter with a clear set of regional priorities with which to focus investment.

It is acknowledged that various land managers will continue to have different priorities for funding, however the plan allows stakeholders to identify and align their priorities with broader regional goals to leverage their investments. For example, grant and other funding programs should be encouraged to align with the agreed regional priorities. The tenure-neutral approach also allows for improved coordination of funds across landscapes and boundaries.

Significant investments currently made via Local Councils, the Weeds Action Program and Catchment Action NSW (NSW Government) and National Landcare Program (Australian Government) are expected to continue.

The Public Reserves Management Fund Program (PRMFP) provides an annual source of funding for weed management on Crown reserves. Managers of any NSW Crown reserve, as well as freehold showgrounds and schools of arts, may be eligible to apply for PRMFP funding. The PRMFP is a self-sustaining program that is supported by income generated from loan interest, leases and licences on Crown land.

Bush Fire Funding provides for hazard reduction works on Crown land, which may include mitigation works for weed invasion associated with maintenance of fire trails and asset protection zones at bushland/urban interfaces.

Greater Sydney Local Land Services will need to increase support for weed management to fulfil its responsibility for delivery of the plan, including assisting with educational and community outreach programs.

Public and private land managers should align their weed control activities with this plan to meet the objectives, and where required prioritise their aims.

Finally, the valuable services provided by Landcare, Bushcare and other volunteer/community groups can be coordinated to assist in meeting regional weed management objectives.

6.5 Community engagement and awareness

The existing Communication Plan prepared under the WAP 2010-15 program will need to be reviewed and updated as part of the implementation of this plan. While the four subregional weeds committees will continue to play a significant role in community engagement, Greater Sydney Regional Weed Committee will need to facilitate educational and community outreach programs. Other stakeholders, particularly those represented on the Regional Weed Committee, will play an important role in communicating with their sectors.

7. Measuring success and continuous improvement

Measuring and reporting on progress against key performance indicators, is particularly important, as are practices that promote reflection and learning to inform decision making. This section covers how we intend to address and document to what extent goals have been achieved, as well as evaluating performance, and reviewing our activity and focus.

7.1 Measuring performance

In common with other agencies and businesses, Greater Sydney Local Land Services has a responsibility to demonstrate to its customers, investors and stakeholders that its strategies are sound and effective. Underpinning all strategies, programs and systems will be a requirement to monitor, evaluate and report on performance.

The committee will work with Greater Sydney Local Land Services to establish a monitoring, reporting, evaluation and improvement (MERI) process that is consistent with the Greater Sydney Local Land Services and Natural Resource Commission standards. This MERI framework will facilitate the review of results against planned immediate, intermediate and long-term outcomes. It will also enable a systematic and objective assessment of the effectiveness and efficiency of actions, policies, projects and programs.

This plan depends on collaboration and sound partnerships for strategic weed planning, implementation and reporting. The development of measures to track the establishment of a workable collaborative approach is important to support tenure neutral implementation. The committee will also track resources secured and aligned for implementing the plan.

7.1.1 Performance indicators and reporting

Standardised MERI systems will be used to compile and report on the efforts and achievements of stakeholders in contributing to this plan. Achieving consistency will require the use of:

- key performance indicators
- standard local monitoring and reporting protocols that support region and state-wide needs
- evaluation by partners and the committee to guide improvement in weed management projects, programs and policies

Performance measures will be developed to enable tracking of the progressive impacts of interventions and investment in priorities and will relate to the goals for this plan as outlined below.

Shared responsibility (Goal 1)

- Adoption of leading practice (by sector)
- Awareness and education programs delivered with uptake indicated by community involvement in weed control
- Community capacity and capability to undertake weed biosecurity (knowledge, skills, barriers addressed, networks, resources) increased.

Sustainable landscapes (Goals 2 and 3)

- New incursions of high priority weeds avoided
- New incursions of high priority weeds eradicated or destroyed
- Spread of high priority weeds prevented
- Impacts of widespread weeds on high priority assets reduced
- Sources of weed invasion identified and managed
- Weed impacts on natural ecosystems reduced or avoided.
- Weed risks or impacts to production / industries reduced (economic goal).

Collaborative leadership and innovation (Goal 4)

- Percentage of supporting plans and processes completed (see section 6.3)

Available metrics can be used in the short term based on existing knowledge, while we refine metrics to provide more accurate measures of progress.

A wide range of metrics in use by committee member organisations, stakeholders and through the Weeds Action Program 2015-2020 and other programs. These will take time to collate and assess. Agreed metrics will be considered by the committee in consultation with the State Weeds Committee.

Review and reporting on performance against this plan will occur annually. A component of this review will be an evaluation of our regional contribution to the new biosecurity reforms and their influence on weed management in the Greater Sydney region.

Our approach to MERI must meet the needs of customers, investors and stakeholders. We must also be able to report on investment outcomes at a range of scales – local, sub-regional, and regional. Standardised reporting should ideally support:

- individual stakeholder needs for local level reporting
- state level reporting and reporting to investors
- annual reporting on implementation and progress of this plan.

7.1.2 Information management

Data collection and management of information is crucial to the adoption of standardised approaches for the region, and for the implementation of MERI procedures.

The committee will oversee the coordinated development of systems for:

- adopting standard regional data (including weed mapping) capture, storage, record keeping and retrieval protocols
- collecting, synthesising and storing data in a form useful for multiple stakeholders
- contributing weed data and management information to the Biosecurity Information System
- contributing to local, regional and state-wide weed information and knowledge platforms that support research capacity and capability
- ensuring that weed information and data are readily available to stakeholders for use in research, updating management plans and reporting.

The data and information collected will be integrated into state-wide data sets and be accessible through open government wherever possible. It will contribute to whole-of-NSW reporting on the state and trend of asset conditions including the State of the Environment report and reporting against objectives for the Invasive Species Plan.

7.1.3 Strengthening science and research capacity

Research plays an important role in evaluating and informing practice, supporting innovation and informing future directions. Engaging proactively with the research community is fundamental to improving the region's weed management planning and practice. Through links with the SWC, the regional Committee will contribute to and facilitate:

- engagement with the science researchers, community, the aboriginal community, government and industry to identify current knowledge gaps and to document weed species research priorities.
- stronger partnerships and active participation in industry, government and university collaborations for weeds research
- new and updated regional and sub-regional weed risk assessments
- development of new technologies and innovative approaches to the management of weed risks
- investigation of biological control programs for priority weeds
- a better understanding in the region of the impacts of a changing climate on weed behaviour and the interplay between natural systems and weeds
- incorporation of research findings into weed management decision-making (this is part of adaptive management).

7.2 Adaptive management and continuous improvement

The Greater Sydney Regional Weed Committee will foster adaptive management and continual improvement in weed management. Adaptive management is used in changing environments, where optimal management procedures have not been determined. It is based on a continuous improvement cycle: 'plan–do–learn'. This is underpinned by monitoring, reporting and evaluation processes, and the subsequent improvement of planning and delivery based on lessons learned.

Local Land Services uses a "triple loop" learning approach which applies learning at the following scales to drive continuous improvement:

- project (where learning focuses on improving project design and practices),
- program (where learning focuses on improving strategies, targets and assumptions),
- organisational (where learning focuses on improving governance and systems).

This approach is outlined in the Greater Sydney Local Land Services Local Strategic Plan and will provide the basis for our MERI. The application of triple loop learning to this plan will be addressed in consultation with lead organisations and delivery partners following plan approval.

7.3 Plan review

A mid term review of this plan will be undertaken at year 3 (2020) and a full review will be undertaken nearing the end of the five year term for this plan (2022). Weed risk assessments will be updated as needed from time to time and, a particular focus at year 3 will be on evaluation and review of weed lists in this plan (Appendix 1 and 2).

Both the regional priority weed list (Appendix 1) and the additional regional weed list (Appendix 2) may be amended as necessary in accordance with the process outlined in chapter 4.

8. List of Abbreviations

BIS	Biosecurity Information System
DPI	NSW Department of Primary Industries
Dol	Department of Industry
GBD	General Biosecurity Duty
ISP	NSW Invasive Species Plan 2015-2022
km	kilometre
LGSA	Local Government and Shires Association
LLS	Local Land Services
MERI	Monitoring, evaluation, reporting and improvement
OEH	The NSW Office of Environment and Heritage
NPWS	NSW National Parks and Wildlife Service
NRC	Natural Resources Commission
RSWMP	Regional Strategic Weed Management Plan
RWC	Regional Weed Committee
SWC	State Weeds Committee
TSR	Travelling stock reserve
WAP	NSW Weeds Action program

9. Glossary

Aboriginal cultural heritage: Aboriginal cultural heritage consists of places and items that are of significance to Aboriginal people because of their traditions, observances, lore, customs, beliefs and history. It provides evidence of the lives and existence of Aboriginal people before European settlement through to the present. Aboriginal cultural heritage is dynamic and may comprise physical (tangible) or non-physical (intangible) elements.

Adaptive management: A management approach based on the science of learning by doing. It involves testing the response of a system then applying this understanding to future decisions.

Asset: Land or infrastructure with environmental, economic or social value. For example, National Park, bushland reserve, threatened species habitat, agricultural land, drinking water catchment, sporting field, public park.

Asset protection: Preventing the spread of weed species to high value assets of economic, environmental and/or social value or reducing the impact on the high value asset for weeds already present.

Best practice: A technique or methodology that, through experience and research, has proven to reliably lead to a desired result. Also see leading practice.

Biodiversity: The variety of all life forms: the different species of plants, animals, fungi, bacteria and other micro- organisms, the genes they contain and the ecosystems (the variety of habitats, biotic communities and ecological processes) of which they form a part.

Biosecurity: Protecting the economy, environment and community from the negative impacts of pests, diseases and weeds.

Collaboration: Working together to develop an understanding of all issues and interests to work out alternatives and identify preferred solutions for joint decision making.

Containment: Preventing the spread of weed species beyond a predefined area and reducing the impact where it occurs.

Country: A term used by Aboriginal people to refer to the land to which they have a traditional attachment to.

Customer: Any land manager within the state or region, irrespective of whether they are private or public land managers, ratepayers or non-ratepayers.

Emergency Management: Management related to preparedness, response and recovery for actual or imminent animal pest and disease and plant pest and disease emergencies, natural disasters and other emergencies impacting on primary production or animal health and safety.

Eradication: To permanently remove a weed species and its propagules from an area.

Governance: The framework of rules, structures, interactions and practices by which the Greater Sydney Local Land Services Board exercises power, responsibility and decision making to ensure accountability, fairness, and transparency in relationship to the Greater Sydney region's customers, stakeholders and investors.

General Biosecurity Duty: Under the *Biosecurity Act 2015* a General Biosecurity Duty (GBD) applies to all weed species that present a biosecurity risk. For weeds, the GBD means that any person dealing with plant matter, who knows or ought reasonably to know the biosecurity risk posed by that dealing, must take measures to prevent, minimise or eliminate the biosecurity

risk (as far as is reasonably practicable). 'Dealing' has a broad definition in the act. Plant matter includes plants, parts of plants and seeds.

Habitat: A place suitable for survival and/or reproduction of a particular plant or animal.

Hygiene protocols: Actions or measures in place to assist in preventing the potential spread of weeds by humans, material (soil, gravel, plants) vehicles, machinery and equipment. For example, cleaning machinery and vehicles, checking clothing and equipment for weed seeds or weed fragments, and removing sources of weed reinfestation around a control sites.

Investor: Organisations and individuals who invest in Local Land Services and leverage outcomes from this investment.

Landscape: Any section of land or coast and its natural features, including rivers and other water bodies. Represents the overlay of the variety and arrangement of physical landforms (e.g. rivers, escarpment, rocky reefs), communities of people (e.g. Aboriginal, rural) and land uses (e.g. urban, conservation, agricultural).

Leading practice: Currently accepted best practice.

Prevention: To prevent a weed species arriving and establishing in an area.

Stakeholder: Organisations that collaborate and partner with Local Land Services directly to support customer service delivery.

Travelling stock reserve:

- route or camping place reserved for travelling stock route or camping place under the Crown Lands Act 1989
- reserve for travelling stock, water reserve, reserve for access or crossing (where the reserve is for the purpose of providing travelling stock with access to or a crossing of water, whether expressly notified for that purpose or not), or
- stock watering place.

Weed: Plants (foreign to the Region) that are unwanted in a given situation and which usually have detectable negative economic, environmental or social impacts.

Weed Action Program (WAP): NSW Government funding program supporting delivery of priority weed investment to local government, Local Land Services and local control authorities.

10. References

Australian Government, Weeds in Australia. <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/why/factors.html>

Bradley, J. (1988). Bringing back the bush: The Bradley Method of Bush Regeneration.

Chippendale, J.F. (1991). Potential returns to research on rubber vine (*Cryptostegia grandiflora*). Master of Agricultural Studies Thesis, University of Queensland, Brisbane.

Coutts-Smith, A.J. and Downey, P.O. (2006) Impact of weeds on threatened biodiversity in New South Wales. Technical Series no. 11, CRC for Australian Weed Management, Adelaide.

Department of the Environment and Energy. <http://www.environment.gov.au/biodiversity/invasive/weeds/help/nursery.html>, accessed on 31 October 2016

Department of Primary Industries (2013). NSW Biosecurity Strategy 2013 – 2021. Department of Primary Industries a division of NSW Department of Trade and Investment, Regional Infrastructure and Services. 28p.

Department of Primary Industries (2015). *Biosecurity Act 2015* Discussion Paper: Weeds. Department of Primary Industries, Orange.

Department of Primary Industries: *Biodiversity priorities for widespread weeds - Statewide framework* <http://www.dpi.nsw.gov.au/biosecurity/weeds/strategy/handbook/cmas>, accessed 7 April 2017

Ensby, R. (2016) Personal communication, R Ensby, DPI Invasive Species Officer.

Environmental Weeds Working Group (2007). Guidelines and procedures for managing the environmental impacts of weeds on public lands in Victoria 2007. Department of Sustainability and Environment, Melbourne.

Hobbs, R.J. and Humphries, S.E. (1995). An integrated approach to the ecology and management of plant invasions. *Conservation Biology* 9, pp761-70.

Interim Biogeographic Regionalisation for Australia (IBRA), Version 7 (2012) <https://www.environment.gov.au/land/nrs/science/ibra/australias-bioregions-maps>

Johnson, S.B. (2012). Economic tools ≠ policy actions. Why benefit cost analyses are not a policy panacea for weedy but commercially valuable plant species. In proceedings of the 18th Australasian Weeds Conference, Melbourne, Victoria. pp 195-198.

Local Government and Shires Association of NSW (2011), Submission on the NSW Budget for 2011/12

Natural Resources Commission (2014) Weeds – Time to get serious. Review of weed management in NSW. Final report and recommendations May 2014. Natural Resources Commission, Sydney, NSW.

Natural Resources Commission (2016). NSW Government response: Weeds – Time to get serious. Review of weed management in NSW, Sydney.

Nature Conservation Council of NSW. <https://www.nature.org.au> accessed on 30 November 2016

New South Wales Office of Environment and Heritage (OEH) (2013) Regional Pest Management Strategies <http://www.environment.nsw.gov.au/pestsweeds/RegionPestManagement.htm>

New South Wales Office of Environment and Heritage (OEH) (2016a) pers. comm. Wellman, L and Kerr, C.

Randall, R. P. (2000). 'Which are my worst weeds?' A simple ranking system for prioritising weeds. *Plant Protection Quarterly* , 15; 109-115.

Royal Botanic Gardens & Domain Trust (2013). PlantNET - The Plant Information Network System of the Royal Botanic Gardens & Domain Trust, Sydney, Australia, available at: <http://plantnet.rbgsyd.nsw.gov.au>

Scott, J.K., Webber, B.L., Murphy, H., Ota, N., Kriticos, D.J., and Loeschel, B. (2014) AdaptNRM Weeds and climate change: supporting weed management adaptation. Accessed at: www.AdaptNRM.org

Sinden, J., Jones, R., Hester, S., Odom, D., Kalisch, C., James, R., and Cacho, O. (2005). The economic impact of weeds in Australia.

Appendix 1: Priority weeds for the Greater Sydney Local Land Services region

This appendix covers State level determined priorities (A1.1) and regionally determined priorities (A1.2).

The *Biosecurity Act 2015* and regulations provide specific legal requirements for state level priority weeds (A1.1) and high risk activities. For each state level priority weed, the state objective and how this objective is achieved through specific requirements under the *Biosecurity Act 2015* and regulations is covered. These specific regulatory requirements include Prohibited Matter, Biosecurity Zones, Mandatory Measures, Control Orders (see Table 2.1 and Section 4.2).

A1.2 in this appendix identifies regionally prioritised weeds and outcomes to demonstrate compliance with the General Biosecurity Duty. Recommended measures for these weeds are provided in the NSW DPI web and mobile based application WeedWise, as practical advice on achieving these outcomes.

Hierarchy of A1.1 and A1.2

To be considered a priority weed, the species must appear in either A1.1 or A1.2. Species are generally listed in a hierarchical order based on management objective, with Prevention the highest priority followed by Eradication, Containment and Asset Protection. Specific legal requirements apply to State determined priorities (A1.1), while Regional Priorities (A1.2) include “outcomes to demonstrate compliance with the General Biosecurity Duty” and “Strategic responses in the region” to achieve the relevant management objective (ie Prevention, Eradication, Containment or Asset Protection).

Generally a priority weed species will appear in either A1.1 or A1.2, however some species appear in both of these lists. This can be for a number of reasons including:

- For alligator weed and water hyacinth – that the Greater Sydney Region occurs within the core infestations of these weeds. In these cases, the regional management objectives, outcomes to demonstrate compliance with the GBD, and strategic response are given in A1.2.
- The legal requirements specified in A1.1 need to be supplemented by outcomes to demonstrate compliance with the GBD in A1.2 to achieve the desired management objectives in the Greater Sydney region, e.g. Cat’s claw creeper, Serrated tussock, *Salvinia* and some *Asparagus* species.

A1.1 State level determined priority weeds

State Priority Weed Objective – PREVENTION:	
<i>The following weeds are currently not found in the state, pose significant biosecurity risk and prevention of the biosecurity risk is a reasonably practical objective.</i>	
Species	Biosecurity Act requirements & Strategic Response in the region
All species of vascular plant (Tracheophyta)	<p>Mandatory Measure (Division 8, Clause 34) Duty to notify on importation of plants into the State:</p> <p>(1) A person must not import a species of vascular plant (Tracheophyta) into the State if the species is not currently present in the State unless the person has, at least 20 working days before the plant is imported into the State, notified the species of plant and its proposed location within the State.</p> <p>(2) The notification is to be given to the Secretary and is to be given in accordance with Part 6.</p> <p>(3) A species of plant is taken not to be present in the State if the National Herbarium of New South Wales does not show it as being present in the State.</p> <p>Note. See http://plantnet.rbsyd.nsw.gov.au/.</p> <p>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.</p>
Gamba grass - <i>Andropogon gayanus</i>	
Pond apple - <i>Annona glabra</i>	
Bridal veil creeper - <i>Asparagus declinatus</i>	
Kochia - <i>Bassia scoparia</i> (excluding subsp. <i>trichophylla</i>)	
Spotted knapweed - <i>Centaurea stoebe</i> subsp. <i>australis</i>	
Black knapweed - <i>Centaurea x moncktonii</i>	
Siam weed - <i>Chromolaena odorata</i>	
Koster's curse - <i>Clidemia hirta</i>	
Rubber vine - <i>Cryptostegia grandiflora</i>	
Anchored water hyacinth - <i>Eichhornia azurea</i>	
Hawkweed - <i>Hieracium</i> spp (all species)	
Hydrocotyl/Water pennywort - <i>Hydrocotyle ranunculoides</i>	
Lagarosiphon - <i>Lagarosiphon major</i>	
Frogbit / Spongeplant - <i>Limnobium</i> spp. (all species)	
Yellow burrhead - <i>Limnocharis flava</i>	
Miconia - <i>Miconia</i> spp (all species)	
Mikania vine - <i>Mikania micrantha</i>	

State Priority Weed Objective – PREVENTION:	The following weeds are currently not found in the state, pose significant biosecurity risk and prevention of the biosecurity risk is a reasonably practical objective.
Species	Biosecurity Act 2015 requirements & Strategic Response in the region
Mimosa - <i>Mimosa pigra</i>	
Eurasian water milfoil - <i>Myriophyllum spicatum</i>	
Mexican feather grass - <i>Nassella tenuissima</i> (syn. <i>Stipa tenuissima</i>)	<p>Prohibited Matter (Part 4, Biosecurity Act, 2015): A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.</p>
Broomrape - <i>Orobanche</i> spp. (all species except the native <i>O. cernua</i> var. <i>australiana</i> and <i>O. minor</i>)	
Water soldier - <i>Stratiotes aloides</i>	
Witchweed - <i>Striga</i> spp. (except the native <i>S. parviflora</i>)	
Water caltrop - <i>Trapa</i> spp. (all species)	
Karoo acacia - <i>Vachellia karroo</i> (syn. <i>Acacia karroo</i>)	
Prickly acacia - <i>Vachellia nilotica</i> (syn. <i>Acacia nilotica</i>)	
	<p>Prohibited Matter (Part 4, Biosecurity Act, 2015): A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.</p>
<p>Mandatory Measure (Division 8, Clause 35, Biosecurity Regulation, 2017) - <i>Parthenium weed carriers – machinery and equipment</i></p> <p>(1) This clause applies to the following equipment:</p>	
<ul style="list-style-type: none"> (a) grain harvesters (including the comb or front), (b) comb trailers (including the comb or front), (c) bins used for holding grain during harvest operations (d) augers or similar equipment used for moving grain (e) vehicles used for transporting grain harvesters (f) vehicles used as support vehicles with grain harvesters and that have been driven in paddocks during harvest operations, and (g) mineral exploration drilling rigs and vehicles used for transporting those rigs. 	
<p>(2) A person must not import into the State from Queensland any equipment to which this clause applies</p>	
	<p>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.</p>

Species	Biosecurity Act 2015 requirements & Strategic Response in the region
	<p>Biosecurity (Boneseed) Control Order 2017</p> <p>6. Control measures for owners and occupiers of land</p> <p>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Boneseed Control Zone on which there is Boneseed must:</p> <p>(a) notify the local control authority for the area if the Boneseed is part of a new infestation on the land:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the new infestation; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Boneseed, including the property identification code for the land (if this is known); and (3) any other information reasonably requested by the local control authority; and <p>(b) immediately destroy all Boneseed on the land;</p> <p>(c) ensure that subsequent generations of Boneseed are destroyed; and</p> <p>(d) the land is kept free of Boneseed.</p> <p>(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>7. Control measures for persons dealing with carriers</p> <p>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Boneseed in the Boneseed Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Boneseed on the land or in or on the carrier, must:</p> <p>(a) ensure that Boneseed (including any seed and propagules) is not moved from the land; and</p> <p>(b) immediately notify the local control authority for the area:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the presence of Boneseed; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Boneseed, including the property identification code for the land (if this is known); and iv) any other information reasonably requested by the local control authority. <p>(c) The person who deals with a carrier of Boneseed does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</p> <p>Regional Strategic Response:</p> <ul style="list-style-type: none"> • manage in accordance with New Weed Incursion Plan • detailed surveillance and mapping to locate infestations • high level analysis of pathways to identify potential introduction areas and prevention options • implement quarantine and/or hygiene protocols, and • monitor progress towards eradication

State Priority Weed Objective – ERADICATION:

The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Boneseed
-*Chrysanthemoïdes*
monilifera
subspecies
monilifera

State Priority Weed Objective – ERADICATION:

The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Species	Biosecurity Act 2015 requirements & Strategic Response in the region
	<p>Biosecurity (Chinese violet) Control Order 2019</p> <p>6. Control measures for owners and occupiers of land</p> <p>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Chinese violet Control Zone on which there is Chinese violet must:</p> <p>(a) notify the local control authority for the area if the Chinese violet is part of a new infestation on the land:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the new infestation; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Chinese violet, including the property identification code for the land (if this is known); and (3) any other information reasonably requested by the local control authority; and <p>(b) immediately destroy all Chinese violet on the land;</p> <p>(c) ensure that subsequent generations of Chinese violet are destroyed; and</p> <p>(d) the land is kept free of Chinese violet.</p> <p>(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>7. Control measures for persons dealing with carriers</p> <p>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Chinese violet in the Chinese violet Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Chinese violet on the land or in or on the carrier, must:</p> <p>(a) ensure that Chinese violet (including any seed and propagules) or matter suspected to be or contain Chinese Violet (including any suspected seeds and propagules) is not moved from the land; and</p> <p>(b) immediately notify the local control authority for the area:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the presence of Chinese violet; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Chinese violet, including the property identification code for the land (if this is known); and iv) any other information reasonably requested by the local control authority. <p>(c) The person who deals with a carrier of Chinese violet does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>Regional Strategic Response:</p> <ul style="list-style-type: none"> • manage in accordance with New Weed Incursion Plan

Chinese violet –
Asystasia gangetica

<p>State Priority Weed Objective – ERADICATION:</p> <p><i>The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.</i></p>	<p>Species</p> <p>Biosecurity Act 2015 requirements & Strategic Response in the region</p> <p>Biosecurity (Parkinsonia) Control Order 2017</p> <p>6. Control measures for owners and occupiers of land</p> <p>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Parkinsonia Control Zone on which there is Parkinsonia must:</p> <p>(a) notify the local control authority for the area if the Parkinsonia is part of a new infestation of Parkinsonia on the land:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the new infestation; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and (3) any other information reasonably requested by the local control authority; and <p>(b) immediately destroy all Parkinsonia on the land; and</p> <p>(c) ensure that subsequent generations of Parkinsonia are destroyed; and</p> <p>(d) the land is kept free of Parkinsonia.</p> <p>(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>7. Control measures for persons dealing with carriers</p> <p>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Parkinsonia in the Parkinsonia Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Parkinsonia on the land or in or on the carrier, must:</p> <p>(a) ensure that Parkinsonia (including any seed and propagules) is not moved from the land; and</p> <p>(b) immediately notify the local control authority:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the presence of Parkinsonia; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and iv) any other information reasonably requested by the local control authority. <p>(c) The person who deals with a carrier of Parkinsonia does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</p> <p>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.</p>
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State Priority Weed Objective – ERADICATION:

The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Species	Biosecurity Act 2015 requirements & Strategic Response in the region
	<p>Biosecurity (Tropical Soda Apple) Control Order 2017</p> <p>6. Control measures for owners and occupiers of land</p> <p>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Tropical Soda Apple Control Zone on which there is Tropical Soda Apple must:</p> <p>(a) notify the local control authority for the area if the Tropical Soda Apple is part of a new infestation of Tropical Soda Apple on the land:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the new infestation; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and (3) any other information reasonably requested by the local control authority; and <p>(b) destroy all Tropical Soda Apple on the land, including fruit; and</p> <p>(c) ensure that subsequent generations of Tropical Soda Apple are destroyed; and</p> <p>(d) that the land is kept free of Tropical Soda Apple.</p> <p>(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p> <p>7. Control measures for persons dealing with carriers</p> <p>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Tropical Soda Apple in the Tropical Soda Apple Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Tropical Soda Apple on the land or in or on the carrier, must:</p> <p>(a) ensure that Tropical Soda Apple (including any seed and propagules) is not moved from the land; and</p> <p>(b) immediately notify the local control authority for the area:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the presence of Tropical Soda Apple; ii) verbally or in writing; iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number; (2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and iv) any other information reasonably requested by the local control authority. <p>(c) The person who deals with a carrier of Tropical Soda Apple does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p>
	<p>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan</p>

State Priority Weed Objective – CONTAINMENT:	These weeds are widely distributed in some parts of the state. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed these weeds is reasonably practicable.
Land area where requirements apply	Biosecurity Act 2015 requirements & Strategic Response in the region
Alligator Weed - <i>Alternanthera philoxeroides</i>	<p>Biosecurity Regulation 2017 - Part 5, Division 2 (Biosecurity Zone)</p> <p>An owner or occupier of land in the alligator weed biosecurity zone on which there is the weed <i>Alternanthera philoxeroides</i> (Alligator weed) must:</p> <ul style="list-style-type: none"> (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and (b) eradicate the weed or, if that is not practicable, destroy as much of the weed as is practicable and suppress the spread of any remaining weed. <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</p> <p>Regional Strategic Response: Refer Appendix 1.2 Containment.</p>
Bitou Bush - <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i>	<p>Biosecurity Regulation 2017 - Part 5, Division 3 (Biosecurity Zone)</p> <p>An owner or occupier of land in the bitou bush biosecurity zone on which there is the weed <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i> (Bitou bush) must:</p> <ul style="list-style-type: none"> (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and (b) eradicate the weed or, if that is not practicable, destroy as much of the weed as is practicable and suppress the spread of any remaining weed. <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</p> <p>Regional Strategic Response: Manage in accordance with NSW Threat Abatement Plan and Saving Our Species.</p>

State Priority Weed Objective – CONTAINMENT:

These weeds are widely distributed in some parts of the state. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed these weeds is reasonably practicable.

Land area where requirements apply	Biosecurity Act 2015 requirements & Strategic Response in the region
Water Hyacinth <i>Eichhornia crassipes</i> A biosecurity zone, to be known as the water hyacinth biosecurity zone, is established for all land within the State except land in the following regions: (a) Greater Sydney or North Coast, (b) North West (but only land in that region that is in the local government area of Moree Plains), (c) Hunter (but only land in that region that is in the local government area of City of Cessnock, City of Lake Macquarie, Mid-Coast, City of Maitland, City of Newcastle or Port Stephens), (d) South East (but only land in that region that is in the local government area of Eurobodalla, Kiama, City of Shellharbour, City of Shoalhaven or City of Wollongong).	<p>Biosecurity Regulation 2017 - Part 5, Division 4 (Biosecurity Zone)</p> <p>An owner or occupier of land in the water hyacinth biosecurity zone on which there is the weed <i>Eichhornia crassipes</i> (Water hyacinth) must:</p> <ul style="list-style-type: none">(a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and(b) eradicate the weed, or if that is not practicable, destroy as much of the weed as is practicable and suppress the spread of any remaining weed. <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</p> <p>Regional Strategic Response: See Appendix 1.2 Asset Protection.</p>

State Priority Weed Objective – ASSET PROTECTION (Whole of State): These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.		Biosecurity Act 2015 requirements & Strategic Response in the region
Species		
Madeira vine - <i>Anredera cordifolia</i>		
Asparagus weeds - <i>Asparagus aethiopicus</i> , † <i>A. africanus</i> , <i>A. asparagoides</i> including the Western Cape form*, <i>A. plumosus</i> , and <i>A. scandens</i>		
†Cabomba - <i>Cabomba caroliniana</i>		
‡Scotch/English broom - <i>Cytisus scoparius</i> subsp. <i>scoparius</i>		
‡Cat's Claw Creeper - <i>Dolichandra unguis-cati</i>		
Cape/Montpellier broom - <i>Genista monspessulana</i>		
Flax-leaf broom - <i>Genista linifolia</i>		
#Hymenachne - <i>Hymenachne amplexicaulis</i>		
Bellyache bush - <i>Jatropha gossypiifolia</i>		
Lantana - <i>Lantana camara</i>		
African boxthorn - <i>Lyium ferocissimum</i>		
Chilean needle grass - <i>Nassella neesiana</i>		
††Serrated tussock - <i>Nassella trichotoma</i>		
Opuntia- <i>Opuntia</i> spp., <i>Cylindropuntia</i> spp., <i>Austrocylindropuntia</i> spp. (Excludes <i>O. ficus-indica</i>)		# Refer Appendix 1.2 Prevention. † Refer Appendix 1.2 Eradication.
Mesquite - <i>Prosopis</i> spp.		†† Refer Appendix 1.2 Containment.
Blackberry - <i>Rubus fruticosus</i> agg. (Blackberry except the varietals Chester Thornless, Dirksen Thornless, Loch Ness, Silvan, Black Satin, Murrindindi, Smooth Stem, Thornfree and Chehalem)		‡ Refer Appendix 1.2 Asset Protection.
Sagittaria - <i>Sagittaria platyphylla</i>		
†Willows - <i>Salix</i> spp. (excludes <i>S. babylonica</i> , <i>S. X calodendron</i> & <i>S. x reichardtii</i>)		
†† <i>Salvinia</i> - <i>Salvinia molesta</i>		
Fireweed - <i>Senecio madagascariensis</i>		
Silver-leaf nightshade - <i>Solanum elaeagnifolium</i>		
Athel pine - <i>Tamarix aphylla</i>		
††Gorse - <i>Ulex europeus</i>		

A1.2 Regional priority weeds

Regional Priority Weed Objective – PREVENTION: <i>The following weeds are currently not found in the Greater Sydney region, pose significant biosecurity risk and prevention of the biosecurity risk posed by these weeds is a reasonably practical objective.</i>	
Coral creeper - <i>Barleria repens</i>	
East Indian hygrophila - <i>Hygrophila polysperma</i>	
Giant devil's fig - <i>Solanum chrysotrichum</i>	
Giant rats tail grass - <i>Sporobolus pyramidalis</i>	
Hymenachne - <i>Hymenachne amplexicaulis</i>	
Nodding thistle - <i>Carduus nutans</i>	
Spanish broom - <i>Spartium junceum</i>	
Water lettuce - <i>Pistia stratiotes</i>	
Water star grass - <i>Heteranthera zosterifolia</i>	
White blackberry / Mysore raspberry - <i>Rubus niveus</i>	
Outcomes to demonstrate compliance with the GBD	
	Strategic response in the region <ul style="list-style-type: none"> Implement quarantine and/or hygiene protocols Undertake high risk sites & pathways analysis to identify potential introduction areas and preventative options Have a collaborative rapid response protocol in place <p>Supporting documents: New Weed Incursion Plan (includes rapid response protocol) Look, Learn, Act Community awareness program</p>

Regional Priority Weed Objective – ERADICATION: <i>The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.</i>	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
<p>Black willow - <i>Salix nigra</i></p> <ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell. 	<p>Chinese knotweed - <i>Persicaria chinensis</i></p> <ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Climbing asparagus - <i>Asparagus africanus</i></p> <ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell. 	<ul style="list-style-type: none"> • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations.
		<p>Glory lily – <i>Gloriosa superba</i></p> <ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Grey willow – <i>Salix cinerea</i></p> <ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.
		<ul style="list-style-type: none"> • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations.

Regional Priority Weed Objective – ERADICATION:

The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

Outcomes to demonstrate compliance with the GBD

Groundsel bush - Baccharis halimifolia

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Hygrophila - Hygrophila costata

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Kei apple - Dovyalis caffra

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Kidney leaf mud plantain - Heteranthera reniformis

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Kudzu - Pueraria lobata

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Leaf cactus - Pereskia aculeata

- The plant is eradicated from the land and the land is kept free of the plant.
- Local Control Authority is notified if the plant is found on the land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.

Strategic response in the region

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.
- Implement quarantine and/or hygiene controls

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.
- Implement quarantine and/or hygiene protocols.

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.
- Implement quarantine and/or hygiene protocols.

- Destruction of all infestations where feasible.
- Manage in accordance with New Weed Incursion Plan.
- Detailed surveillance and mapping to locate all infestations.
- Implement quarantine and/or hygiene protocols.

Regional Priority Weed Objective – ERADICATION	The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.
Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Ming fern - <i>Asparagus macowanii</i> var. <i>zuluensis</i>	<ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Land managers mitigate the risk of the plant being introduced to their land. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. • Destruction of all infestations where feasible. • Detailed surveillance and mapping to locate all infestations. • High level pathways analysis to identify potential introduction areas and preventative options. • Implement quarantine and/or hygiene protocols. • Monitor progress towards eradication.
<i>Mysore thorn</i> - <i>Caesalpinia decapetala</i>	<ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • The plant or parts of the plant are not traded, carried, grown or released into the environment. • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations. • Implement quarantine and/or hygiene protocols.
<i>Sicilian sea lavender</i> - <i>Limonium hyblaeum</i>	<ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations. • Implement quarantine and/or hygiene protocols.
<i>Sicklethorn</i> - <i>Asparagus falcatus</i>	<ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations. • Implement quarantine and/or hygiene protocols.
<i>Skunk vine</i> - <i>Paederia foetida</i>	<ul style="list-style-type: none"> • The plant is eradicated from the land and the land is kept free of the plant. • Local Control Authority is notified if the plant is found on the land. • The plant or parts of the plant are not traded, carried, grown or released into the environment. • Destruction of all infestations where feasible. • Manage in accordance with New Weed Incursion Plan. • Detailed surveillance and mapping to locate all infestations. • Implement quarantine and/or hygiene protocols.

Regional Priority Weeds objective – CONTAINMENT : These weeds are widely distributed in the region. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.	Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
African olive - <i>Olea europaea</i> subsp. <i>cuspidata</i>	Whole region: <ul style="list-style-type: none"> The plant or parts of the plant are not traded, carried, grown or released into the environment. Within Exclusion zone: <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Within Core infestation: <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Land managers reduce the impact on priority assets. 	Whole region: <ul style="list-style-type: none"> Implement quarantine and/or hygiene protocols. Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives. Monitor change in current distribution to ensure containment of spread. Within Exclusion zone: <ul style="list-style-type: none"> Destruction of all infestations, aiming at local eradication where feasible Within Core infestation: <ul style="list-style-type: none"> Identify priority assets for targeted management. 	Whole region: <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Within Exclusion zone: <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Within Core infestation: <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce the impact on priority assets. <p>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</p> <p>Note a Biosecurity Zone applies to this species under Part 5 of Division 2 of the <i>Biosecurity Regulation 2017</i>. However this does not apply to the Greater Sydney region.</p>
Alligator weed - <i>Alternanthera philoxeroides</i>	Whole region: <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Within Exclusion zone: <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Within Core infestation: <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce the impact on priority assets. 	Blue Mountains LGA: <ul style="list-style-type: none"> Destruction of all infestations, where feasible. Implement quarantine and/or hygiene protocols. Remainder of region: <ul style="list-style-type: none"> Implement quarantine and/or hygiene protocols. Manage in accordance with the Priorities for the control of Alligator Weed in the Sydney Region. 	

Regional Priority Weeds objective – CONTAINMENT:		
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Asparagus fern - <i>Asparagus virgatus</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>An exclusion zone is established for the whole of the region except Central Coast local government area. Central Coast local government area is classified as the core infestation area.</p> <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> Local Control Authority is notified if the plant is found on the land. <p>Within Core infestation:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. 	<ul style="list-style-type: none"> Destruction of all infestations where feasible. Monitor change in current distribution to ensure containment of spread.
Gorse - <i>Ulex - europeus</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Land managers reduce the impact on priority assets. 	<ul style="list-style-type: none"> Destruction of all infestations, aiming at local eradication where feasible. Detailed surveillance and mapping to locate all infestations. Implement quarantine and/or hygiene protocols. Monitor progress towards eradication.

An **exclusion zone** is established for the Blue Mountains local government area. The remainder of the region is classified as the **core infestation area**.

The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell,

Regional Priority Weeds objective – CONTAINMENT:

Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Holly-leaved senecio - <i>Senecio glastifolius</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. Local Control Authority is notified if the plant is found on the land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Land managers reduce the impact on priority assets. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Monitor change in current distribution to ensure containment of spread.
Horsetails - <i>Equisetum</i> spp.	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Local Control Authority is notified if the plant is found on the land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Within Core infestation:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. 	<ul style="list-style-type: none"> Destruction of all infestations, where feasible. Monitor change in current distribution to ensure containment of spread.

Regional Priority Weeds objective – CONTAINMENT:			
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region	
Salvinia - <i>Salvinia molesta</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Local Control Authority is notified if the plant is found on the land. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. <p><i>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.</i></p>	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Monitor change in current distribution to ensure containment of spread. 	
Sea spurge - <i>Euphorbia paralias</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Local Control Authority is notified if the plant is found on the land. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. 	<ul style="list-style-type: none"> Destruction of all infestations, where feasible. Detailed surveillance and mapping to locate all infestations. High level pathways analysis to identify potential introduction areas and preventative options. Implement quarantine and/or hygiene protocols. Monitor progress towards eradication. 	

Regional Priority Weeds objective – CONTAINMENT:

Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Senegal tea - <i>Gymnocoronis spilanthoides</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. Local Control Authority is notified if the plant is found on the land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Monitor change in current distribution to ensure containment of spread.
Serrated tussock - <i>Nassella trichotoma</i>	<p>Whole region:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. Local Control Authority is notified if the plant is found on the land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. 	<ul style="list-style-type: none"> Monitor change in current distribution to ensure containment of spread. Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/ pastures, hygiene and property management plans. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed.

The following legislative requirement also applies:
Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.

Regional Priority Weed Objective – CONTAINMENT:		Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Land area where requirements apply			
Tiger pear - <i>Opuntia aurantiaca</i>		<p>Whole region:</p> <ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Local Control Authority is notified if the plant is found on the land. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land Land managers reduce the impact on priority assets. <p>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</p>	<ul style="list-style-type: none"> Destruction of all infestations, where feasible. Monitor change in current distribution to ensure containment of spread.
Water poppy - <i>Hydrocleys nymphoides</i>		<p>Whole region:</p> <ul style="list-style-type: none"> The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>Within Exclusion zone:</p> <ul style="list-style-type: none"> The plant is eradicated from the land and the land is kept free of the plant. Local Control Authority is notified if the plant is found on the land. <p>Within Core infestation:</p> <ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers prevent spread from their land where feasible. 	<ul style="list-style-type: none"> Monitor change in current distribution to ensure containment of spread. Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans.

Regional Priority Weed Objective – ASSET PROTECTION	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
<i>Cat's claw creeper - <i>Dolichandra unguis-cati</i></i>	<ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce the impact on priority assets. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Identify priority assets for targeted management Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans.
<i>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</i>		
<i>Cabomba - <i>Cabomba caroliniana</i></i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Implement quarantine and/or hygiene protocols.
<i>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</i>		
<i>Giant reed – <i>Arundo donax</i></i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Implement quarantine and/or hygiene protocols.
<i>Green cestrum - <i>Cestrum parqui</i></i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to land used for grazing of livestock. Land managers prevent spread from their land where feasible. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed on grazing land Implement quarantine and/or hygiene protocols.
<i>Ludwigia - <i>Ludwigia peruviana</i></i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers prevent spread from their land where feasible. Land managers reduce the impact on priority assets. The plant or parts of the plant are not traded, carried, grown or released into the environment. Local Control Authority is notified if the plant is found on the land. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed Identify priority assets for targeted management.

Regional Priority Weed Objective – ASSET PROTECTION	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Pampas grass - <i>Cortaderia species</i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers prevent spread from their land where feasible. Land managers reduce the impact on priority assets. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> The plant should be fully and continuously suppressed and destroyed. Identify priority assets for targeted management
Scotch/English Broom - <i>Cytisus scoparius</i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce the impact on priority assets. <p>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</p>	<ul style="list-style-type: none"> The plant should be managed in accordance with a regional best practice guide identifying assets to be protected, including the Greater Blue Mountains World Heritage Area and Sydney water supply catchment lands.
Singapore daisy - <i>Sphagneticola trilobata</i>	<ul style="list-style-type: none"> Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce the impact on priority assets. The plant or parts of the plant are not traded, carried, grown or released into the environment. 	<ul style="list-style-type: none"> Manage in accordance with New Weed Incursion Plan Implement quarantine and/or hygiene protocols. Identify priority assets Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans.
Water hyacinth - <i>Eichhornia crassipes</i>	<ul style="list-style-type: none"> Land managers prevent spread from their land where feasible. The plant or parts of the plant are not traded, carried, grown or released into the environment. <p>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</p>	<ul style="list-style-type: none"> Develop and implement Community Campaign Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans. <p>Note a Biosecurity Zone applies to this species under Part 5 of Division 2 of the Biosecurity Regulation 2017. However this does not apply to the Greater Sydney region.</p>

Appendix 2: Other weeds of regional concern

The following table recognises that whether a plant is a weed depends on the location, and that some plants grown as crops may function as weeds in other land uses. For example, kikuyu is a valuable pasture grass in grazing paddocks but is an invasive weed in the natural environment ie. bushland and National parks. Agapanthus are very popular garden plants, often used as border plants or to hold low banks. However, agapanthus are also known to invade roadsides, bushland and waterways.

Weeds listed in Appendix 2 include species known to occur in the Greater Sydney region as well as species not currently known to occur but at risk of moving into the region in the future. They have been identified as a potential risk in some (not all) situations. Many of the species pose potential risks to biodiversity (i.e. the environment), for example if they were to spread to or be found in a National Park. Some of the species pose potential risks to agriculture and some of the weeds pose potential risks to human health. In most situations this is when ingested but can also include risks associated with asthma and other allergic reactions.

This plan recognises that many weeds are already so well established that they can only be managed and will never be eradicated from the region. The species included in Appendix 2 may warrant resources for control or management programs, or occur in neighbouring regions and are a priority to keep out of the region. Inclusion on the list may assist Local Control Authorities and/or land managers prioritise action in certain circumstances where it can be demonstrated the weed poses a threat to the environment, agriculture and/or the community/human health.

The *Biosecurity Act 2015* provides powers to Local Control Authorities to take action in relation to these weeds in particular circumstances, for example where a weed threatens a high value asset and prevention, elimination or reduction of the risk is feasible and reasonable.

Common name	Scientific name	Asset/value at risk
Aaron's Beard, Rose-of-Sharon	<i>Hypericum calycinum</i>	Environment
African lovegrass	<i>Eragrostis curvula</i>	Environment
African marigold	<i>Cineraria lyratiformis</i>	Environment
Agapanthus	<i>Agapanthus praecox</i> subsp. <i>orientalis</i>	Environment
American Cotton Palm, Cotton Palm, California fan palm.	<i>Washingtonia filifera</i>	Environment
Apple of Sodom	<i>Solanum linnaeanum</i>	Environment, Agriculture, Community amenity
Arrowhead	<i>Sagittaria calycina</i> var. <i>calycina</i>	Environment, Agriculture, Community amenity
Arum lily	<i>Zantedeschia aethiopica</i>	Human health, Environment
Awabuki sweet viburnum	<i>Viburnum odoratissimum</i> var. <i>awabuki</i>	Environment
Balloon vine	<i>Cardiospermum grandiflorum</i>	Environment
Banana passionfruit	<i>Passiflora tarminiana</i>	Environment
Beach daisy	<i>Arctotheca populifolia</i>	Environment, Community amenity

Common name	Scientific name	Asset/value at risk
Berberis, Barberry	<i>Berberis aristata</i> , <i>B. darwini</i> and <i>B. thunbergii</i>	Environment
Billardieria, Bluebell creeper	<i>Billardiera heterophylla</i>	Environment
Black cherry, Wild black cherry	<i>Prunus serotina</i>	Environment
Black locust	<i>Robinia pseudoacacia</i>	Environment, Human health
Blue heliotrope	<i>Heliotropium amplexicaule</i>	Agriculture
Blue hound's tongue	<i>Cynoglossum creticum</i>	Agriculture
Blue morning glory	<i>Ipomoea indica</i>	Environment, Human health
Blue stars	<i>Aristea ecklonii</i>	Environment
Bokhara	<i>Melilotus albus</i>	Environment
Box elder	<i>Acer negundo</i>	Environment
Brazilian button flower	<i>Centratherum punctatum</i>	Environment
Brazilian cherry	<i>Eugenia uniflora</i>	Environment
Broad leaf pepper	<i>Schinus terebinthifolius</i>	Environment
Buckthorn	<i>Rhamnus alaternus</i>	Environment
Buffel grass	<i>Cenchrus ciliaris</i>	Environment
Burr ragweed	<i>Ambrosia confertiflora</i>	Agriculture, human health
Bushman's Poison, Hottentot's-poison, Poison arrow plant, Wintersweet	<i>Acokanthera oblongifolia</i>	Agriculture
Camphor laurel	<i>Cinnamomum camphora</i>	Environment, Agriculture, Human health
Cane needle grass	<i>Nassella hyalina</i>	Agriculture
Cape honeysuckle	<i>Tecoma capensis</i>	Environment
Cape ivy	<i>Delairea odorata</i>	Environment
Cape tulip	<i>Moraea flaccida</i>	Environment, Agriculture
Cassia, Senna	<i>Senna pendula</i>	Environment
Cherry guava	<i>Psidium cattleyanum</i>	Environment, Agriculture
Chinese celtis/ Chinese hackberry	<i>Celtis sinensis</i>	Environment, Agriculture
Chinese elm	<i>Ulmus parvifolia</i>	Environment
Chinese tallow	<i>Triadica sebifera</i>	Environment
Climbing nightshade, Brazillian nightshade	<i>Solanum seaforthianum</i>	Environment, Human health
Coastal morning glory	<i>Ipomoea cairica</i>	Environment
Cockspur coral tree	<i>Erthrina crista-galli</i>	Environment
Cocos palm	<i>Syagrus romanzoffiana</i>	Environment
Coffee bush, Leucaena	<i>Leucaena leucocephala</i>	Environment, Community amenity
Common morning glory	<i>Ipomoea purpurea</i>	Environment, Agriculture
Coolatai grass	<i>Hyparrhenia hirta</i>	Environment, Agriculture
Coral Berry	<i>Ardisia crenata</i>	Environment
Coral tree, Common coral tree	<i>Erythrina x sykesii</i>	Environment
Corky passionflower	<i>Passiflora suberosa</i>	Environment
Cotoneaster	<i>Cotoneaster spp</i>	Environment

Common name	Scientific name	Asset/value at risk
Creeping lantana, trailing lantana	<i>Lantana montevidensis</i>	Environment, Agriculture
Crofton weed	<i>Ageratina adenophora</i>	Environment, Agriculture
Cumbungi	<i>Typha latifolia</i>	Environment
Day-lily, Kwanso	<i>Hemerocallis fulva</i>	Environment
Dense waterweed, Leafy elodea, Egeria, Anacharis, Brazilian elodea	<i>Egeria densa</i>	Environment, Community amenity
Dipogon, Dolichos pea,	<i>Dipogon lignosus</i>	Environment
Dutchmans pipe	<i>Aristolochia elegans</i>	Environment
Espartillo, Broad-kernel espartillo	<i>Amelichloa caudata</i> (syn. <i>Achnatherum caudatum</i>)	Environment, Agriculture
Espartillo – narrow kernel	<i>Amelichloa brachychaeta</i>	Environment, Agriculture
European olive	<i>Olea europaea subsp. europaea</i>	Environment
Firethorn	<i>Pyracantha spp.</i>	Environment
Fishbone fern	<i>Nephrolepis cordifolia</i>	Environment
Formosa lily, Taiwan lily	<i>Lilium formosanum</i>	Environment
Fountain grass	<i>Pennisetum setaceum</i>	Environment
Foxglove tree, Empress tree	<i>Paulownia tomentosa</i>	Environment
Galenia	<i>Galenia pubescens</i>	Environment, Agriculture
Giant Parramatta grass (GPG)	<i>Sporobolus fertilis</i>	Environment, Agriculture
Ginger lily	<i>Hedychium gardnerianum</i>	Environment
Golden rain tree	<i>Koelreuteria elegans</i>	Environment
Golden wreath wattle	<i>Acacia saligna</i>	Environment
Harrisia cactus	<i>Harrisia spp.</i>	Environment
Himalayan honeysuckle	<i>Leycesteria formosa</i>	Environment
Holly, English holly	<i>Ilex aquifolium</i>	Environment
Honey locust	<i>Gleditsia triacanthos</i>	Environment, Agriculture
Indian hawthorn	<i>Rhaphiolepis indica</i>	Environment
Japanese climbing Fern	<i>Lygodium japonicum</i>	Environment
Japanese hawthorn, Yeddo hawthorn	<i>Rhaphiolepis umbellata</i>	Environment
Japanese honeysuckle	<i>Lonicera japonica</i>	Environment
Keriberry	<i>Rubus rugosus</i>	Environment
Kikuyu	<i>Pennisetum clandestinum</i>	Environment
Long leaf water primrose	<i>Ludwigia longifolia</i>	Environment, Agriculture, Community amenity
Lote tree, Nettle tree, Mediterranean hackberry	<i>Celtis australis</i>	Environment
Mahonia, Chinese Holly	<i>Berberis lomariifolia</i>	Environment
Mexican water lily, Yellow water lily	<i>Nymphaea mexicana</i>	Environment
Mimosa bush, Briar bush, Yellow mimosa	<i>Vachellia farnesiana</i>	Environment, Agriculture
Mirror bush, Mirror plant	<i>Coprosma repens</i>	Environment

Common name	Scientific name	Asset/value at risk
Mistflower	<i>Ageratina riparia</i>	Environment, Agriculture
Monkey's comb	<i>Pithecoctenium crucigerum</i>	Environment
Montbretia	<i>Crocosmia x crocosmiiflora</i>	Environment
Mossman river grass	<i>Cenchrus echinatus</i>	Environment
Moth vine, Moth plant	<i>Araujia sericifera</i>	Environment
Mother of millions	<i>Bryophyllum spp.</i>	Environment, Agriculture, Human health
New Zealand flax	<i>Phormium tenax</i>	Environment
Ochna	<i>Ochna serrulata</i>	Environment
Onion Grass	<i>Romulea rosea</i>	Environment, Agriculture
Orange jessamine, Murraya	<i>Murraya paniculata</i>	Environment
Osage orange	<i>Maclura pomifera</i>	Environment
Ox-eye daisy	<i>Leucanthemum vulgare</i>	Environment
Pampas lily of the valley	<i>Salpichroa organifolia</i>	Environment
Paper mulberry	<i>Broussonetia papyrifera</i>	Environment
Paterson's curse	<i>Echium plantagineum</i>	Environment, Agriculture, Human health
Patula pine, Mexican weeping pine	<i>Pinus patula</i>	Environment
Pellitory, Asthma weed	<i>Parietaria judaica</i>	Environment, Human health
Periwinkle, Blue periwinkle	<i>Vinca major</i>	Environment
Phoenix palm, Canary Island date palm	<i>Phoenix canariensis</i>	Environment
Pink trumpet vine	<i>Podranea ricasoliana</i>	Environment
Privet spp.	<i>Ligustrum sinense, Ligustrum lucidum, Ligustrum vulgare</i>	Environment, Human health
Radiata pine, Pine wildings	<i>Pinus radiata</i>	Environment
Rattleseed pod, Rattlepod	<i>Crotalaria juncea</i>	Environment
Red ludwigia	<i>Ludwigia repens</i>	Environment, Agriculture, Community amenity
Reed canary grass	<i>Phalaris arundinacea</i>	Environment
Reed sweet grass	<i>Glyceria maxima</i>	Environment
Rhizomatous bamboo, Black bamboo	<i>Phyllostachys nigra</i>	Environment
Rhizomatous bamboo, Fishpole bamboo, Yellow bamboo	<i>Phyllostachys aurea</i>	Environment
Rhodes grass	<i>Chloris gayana</i>	Environment
Rhus tree	<i>Toxicodendron succedaneum</i>	Human health
Rush	<i>Juncus articulatus</i>	Environment
Rush	<i>Juncus effusus</i>	Environment
Scotch, Illyrian thistles	<i>Onopordum acanthium, O. Illyricum and O. acaulon</i>	Agriculture
Sedge, Cyperus	<i>Cyperus teneristolon</i>	Environment, Agriculture
Spanish heath	<i>Erica lusitanica</i>	Environment
Spiderwort, Moss inch plant	<i>Tradescantia cerinthoides</i>	Environment

Common name	Scientific name	Asset/value at risk
Spiny burrgrass - longispinus	<i>Cenchrus longispinus</i>	Environment, Agriculture, Human health
Spiny rush, Spike rush, Sharp rush	<i>Juncus acutus</i>	Environment
St John's wort	<i>Hypericum perforatum</i>	Environment, Agriculture
Sweet briar	<i>Rosa rubiginosa</i>	Agriculture
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>	Environment, Agriculture
Tall wheat grass	<i>Thinopyrum ponticum</i>	Environment
Tangier Pea	<i>Lathyrus tingitanus</i>	Environment
Telegraph Weed	<i>Heterotheca grandiflora</i>	Environment
Trad	<i>Tradescantia fluminensis</i>	Environment
Tree of heaven	<i>Ailanthus altissima</i>	Environment, Human health
Turkey rhubarb	<i>Acetosa sagittata</i>	Environment
Tussock paspalum, Blue grass	<i>Paspalum quadrifarium</i>	Environment
Tutsan	<i>Hypericum androsaemum</i>	Environment
Umbrella tree	<i>Schefflera actinophylla</i>	Environment
Viper's bugloss	<i>Echium vulgare</i>	Agriculture
Watsonia	<i>Watsonia meriana</i>	Environment
Whisky grass	<i>Andropogon virginicus</i>	Environment
White jasmine, Chinese jasmine	<i>Jasminum polyanthum</i>	Environment
Wild poinsettia	<i>Euphorbia cyathophora</i>	Environment
Wild tobacco bush	<i>Solanum mauritianum</i>	Environment, Agriculture
Yellow bells, Golden bells	<i>Tecoma stans</i>	Environment, Agriculture
Yorkshire fog	<i>Holcus lanatus</i>	Environment

Landholder General Biosecurity Duty Decision Support Tool

DISCLAIMER

This Decision Support Tool has been developed by the Greater Sydney Regional Weed Committee. It has been developed to its current state in good faith using the best available information on the General Biosecurity Duty to provide guidance to Local Control Authorities. The tool has not been formally reviewed or endorsed by the Department of Primary Industries or the State Weed Committee, and should not be relied upon to support compliance action.

Introduction

This guide has been developed as a tool for Local Control Authority (LCA) Authorised Officers to support education and compliance decisions regarding weeds. The guide identifies the various situations which trigger the General Biosecurity Duty (GBD) for a landholder, as well as the actions or responses that are necessary to meet legal requirements and/or community expectations for managing weeds.

The guide clarifies when a GBD exists for a landholder and what the landholder could do to discharge their GBD in regards to weed management. It can be used by LCA Authorised Officers as a basis for advice and compliance actions to landholders, by landholders to clarify their weed management obligations, and by volunteers undertaking weed control on land managed by others.

General Biosecurity Duty (GBD)

The Biosecurity Act 2015 represents a significant move away from the prescriptive nature of the Noxious Weeds Act 1993. While State level determined priority weeds (see Priority Weeds section) continue to be regulated by specific legal requirements (i.e. Prohibited Matter, Control Orders, Biosecurity Zones and Mandatory Measures), for the most part the prescriptive control requirements of the Noxious Weeds Act have been replaced by a General Biosecurity Duty.

The General Biosecurity Duty is defined in Part 3 of the Biosecurity Act 2015.

Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised.

For weeds, the General Biosecurity Duty means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable). Note that the risk-based approach is fundamental to the General Biosecurity Duty. The risk posed by the plant must have been the subject of a risk assessment that determines there is a risk present that requires control action.

A person or organisation is not expected to know about all biosecurity risks, but is expected to know about risks associated with their industry, business, day-to-day work, and hobbies and interests including activities undertaken on a voluntary basis.

This less prescriptive approach to managing biosecurity risks provides greater flexibility in managing risks posed by plants. For example;

- Plants are no longer required to be identified on a list or declared “noxious” before action can be taken to address the risks posed by the plant.
- The general biosecurity duty is outcomes focused. In many cases, there is no need to prescribe exactly how a person is to discharge their general biosecurity duty. A less prescriptive approach recognizes that there may be more than one way to prevent, eliminate or minimise the particular biosecurity risk, and that the person with the biosecurity duty is best placed to decide how the desired outcome can be achieved.

The General Biosecurity Duty supports the principle of ‘shared responsibility’. It increases flexibility in how we can manage biosecurity risks, including weeds. It provides a strong foundation for a proactive and outcome-focused framework based on education and advice instead of prescriptive regulations and processes, but also includes a framework to manage non-compliance.

Although the general biosecurity duty applies broadly, there are a number of elements that must be satisfied for a GBD to exist:

Dealing with – the general biosecurity duty only applies to a person who ‘deals with’ biosecurity matter or a carrier of biosecurity matter. ‘Deal with’ includes a wide range of activities, a full list of which can be found in [section 12](#) of the Act. Some examples of dealing with biosecurity matter relevant to weeds are; to keep, possess, grow, breed, move, supply, manufacture, use or treat, biosecurity matter.

Biosecurity risk – is to have or the potential to have an adverse impact on the economy, the environment or the community. Examples of an adverse impact could include:

- Reduction of quality or quantity of agricultural, horticultural and forestry products
- Changes to natural diversity and balance of ecological communities threatening survival of native plants and animals
- Human health problems such as asthma and other respiratory diseases, skin irritations and poison.

Note that a risk assessment is required to determine if there is a risk present and the significance of the adverse impact.

Knowledge – a person must know, or ought reasonably to know, that there is or is likely to be a biosecurity risk arising from the plant. This is a question of fact and will depend on the circumstances of each situation.

LCA Authorised Officers should, in the first instance, use advisory techniques to guide and teach landholders about how to best manage their weeds. The aim is to still achieve compliance with the Act, but for this to be done in a voluntary capacity.

People who know or ought reasonably to know will generally include people who deal with biosecurity matter or carriers on a regular basis as part of a commercial, recreational or voluntary activity, and people who work professionally (i.e. ‘deal’) with a particular type of biosecurity matter or carrier. From a compliance/enforcement perspective, you cannot assume

that a person knows simply because of their occupation or activities. It is the responsibility of the regulator (ie LCA in this instance) to ensure the person knows by providing information about the risk, that the person has a GBD and some options available to discharge the GBD.

'Reasonably practicable' – what is reasonably practicable for the prevention, elimination or minimisation of a biosecurity risk will depend on what is reasonably able to be done at a particular time, taking into account all relevant matters such as:

- the nature and potential impact of the biosecurity risk,
- the person's level of knowledge of the risk and related actions that could reasonably be taken to prevent, eliminate or minimise the risk, and
- the cost, availability and effectiveness of these actions.

It is not likely to be reasonably practicable if the cost is greatly disproportionate to the risk.

For weeds, this basically means that it must be both reasonable and feasible to prevent, eliminate or reduce the risk associated with the weed. For weeds that are not widespread and that have the potential to degrade land in the region, this will generally mean eradicating the plant or preventing its spread from the property. For widespread weeds that are beyond eradication at a regional level, this will generally mean taking measures to reduce the extent of the weed to no greater than that occurring on other lands in the area. See [section 16](#) of the Act for the legal definition.

Preventing, eliminating or minimising the biosecurity risk – the risk must be prevented or eliminated if reasonably practicable, otherwise it must be minimised so far as is reasonably practicable.

It should be noted that a landholder or land manager is free to control weeds more rigorously than required to meet their general biosecurity duty, and may consider it desirable to do so to protect their high value commercial or environmental assets.

More information regarding the General Biosecurity Duty can be found on the [NSW DPI website](#).

Priority Weeds

The priority weeds for the Greater Sydney Local Land Services region are identified in Appendix 1 of this plan. Appendix 1 covers State level determined priorities (A1.1) and regionally determined priorities (A1.2).

State level determined priority weeds are subject to other legislative requirements. The Biosecurity Act 2015 and regulations provide specific legal tools for managing state level priority weeds (A1.1). These specific regulatory tools include Prohibited Matter, Control Orders, Biosecurity Zones and Mandatory Measures Regulation.

Table A2.1 Requirements for State level priority weeds

Prohibited Matter Biosecurity matter listed in Schedule 2, Part 1 of the Biosecurity Act 2015 for the purpose of preventing entry of that matter into NSW or a part of NSW. Prohibited matter relevant to the Greater Sydney region is listed in Appendix A1.1. Prohibited matter includes weeds nationally targeted for eradication and presently not in NSW.
Control Orders These are to establish one or more control zones and related measures to prevent, eliminate, minimise or manage a biosecurity risk or impact. Control orders are for managing weeds under approved eradication programs and last for five years (or can be renewed for longer-term eradication programs). Control orders are published in the NSW Government Gazette and/or NSW DPI website. Control orders currently in place for Boneseed, Parkinsonia and Tropical Soda Apple and can be found in Appendix A1.1.
Biosecurity Zones These aim at containment of a species and provide for ongoing strategic management in a defined area of the state. A Biosecurity Zone specifies the measures that must be taken in the defined area to manage the weed. Species may also be subject to other measures tailored by the region either within the zone or outside it. Biosecurity zones for Alligator Weed, Bitou Bush and Water Hyacinth are established under Part 5 of the Biosecurity Regulation 2017 and can also be found in Appendix A1.1.
Mandatory Measures Regulation This requires parties to take specific actions with respect to weeds or carriers of weeds. Mandatory Measures are defined in the Biosecurity Regulation 2017 and include prohibition on certain dealings - including Weeds of National Significance (WoNS) (Division 8 Clause 33), Parthenium weed carriers - machinery and equipment (Division 8 Clause 35), and duty to notify of importation of plants into the state (Division 8 Clause 34). Mandatory measures relevant to the region are listed in Appendix A1.1.

Regional priority weeds

Appendix 1.2 (A1.2) of this plan identifies regionally prioritised weeds and outcomes to demonstrate compliance with the General Biosecurity Duty. Recommended measures for these weeds are included in A1.2 and also provided in the NSW DPI web and mobile based application [WeedWise](#), as practical advice on achieving these outcomes.

Other weeds

If a weed poses a biosecurity risk in a particular area, but is not the subject of any specific legislation, or identified as a priority weed in Appendix 1 of a Regional Strategic Weed Management Plan, then LCA Authorised Officers may in some cases rely on the general biosecurity duty to manage that weed.

Remember, there are a number of elements (i.e. dealing with, biosecurity risk, knowledge and reasonably practicable) that must be met for the GBD to exist.

It is essential that the risk posed by the plant has been the subject of a risk assessment that determines there is a biosecurity risk present that requires control action.

The general biosecurity duty only applies to people who deal with the particular weed and who know or should reasonably know of the biosecurity risks associated with that weed.

Information should be made available to property owners about ways to control the spread of a particular weed. However, in the absence of specific legislative requirements, property owners are not required to follow any specific method so long as they take reasonably practicable measures to control the spread of the weed.

If the general biosecurity duty applies, typically, property owners including those in urban environments might be required to discharge their duty by controlling the movement of weeds onto and off their land by:

- reducing the risk of weeds spreading to neighbouring properties, taking into account the likely means of distribution, and
- taking measures to avoid introducing weeds to the property when acquiring ornamental plants, and
- finding out where products brought onto the property (such as soil, mulch or gravel) originated and taking steps to manage any risks from it, and
- eradicating those weeds that are likely to result in degradation of land in the region.

Property owners in peri-urban or rural environments might also be required to:

- hold newly acquired livestock in a restricted area before releasing them onto the property,
- hold stock in a weed-free area before transporting them off the property if they have been exposed to weed seed, and
- avoid selling or bringing onto the property feed, soil, gravel or other products that might contain weed seed.

Landholder General Biosecurity Duty decision diagram

The following decision diagram has been developed as a guide for LCA Authorised Officers to help determine if landholders have a general biosecurity duty in relation to a specific weed species on their land, and how this duty is satisfied. The decision diagram may be applied to both terrestrial and aquatic weeds.

LANDHOLDER GENERAL BIOSECURITY DUTY DECISION DIAGRAM

GBD PRINCIPLES FOR LANDHOLDERS

- 1 A fundamental goal of the general biosecurity duty (GBD) is to reduce the impact of weeds on neighbouring lands - primarily through stopping weed spread.
- 2 Where there is no discernible difference between the extent of a weed on a landholders property and neighbouring lands the GBD is not triggered for that weed.
- 3 Control obligations to discharge a landholder's GBD must match community expectations at the regional scale and be reasonable and feasible.
- 4 Landholders also have a responsibility to exercise awareness and due diligence when introducing plant material onto their land, or accepting equipment or fodder.

IDENTIFY WEED SPECIES ON PROPERTY

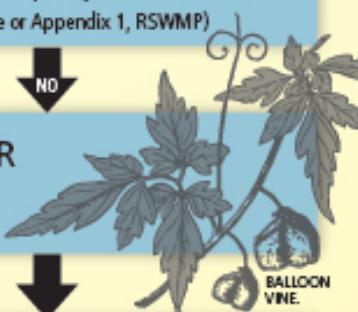


PRIORITY WEED

Is the species a State or Regional level determined priority weed?
(See WeedWise or Appendix 1, RSWMP)



ALL OTHER WEEDS



BIOSECURITY RISK

For all other weeds, has the plant species been subject to a weed risk assessment that determines there is a biosecurity risk present that requires control action?



KNOWLEDGE

Does the landholder know or reasonably ought to know about the biosecurity risk posed by the plant/s?

YES

NO

NO

YES

NO

NO

NO

NO

YES

GBD IS NOT TRIGGERED

GBD does not exist until information is provided. LCA should consider providing landholder with advice and education.



KNOWLEDGE

Does the landholder know or reasonably ought to know about the biosecurity risk posed by the plant/s?



GBD IS TRIGGERED

Species to be managed to achieve the State or Regional Priority Weed Objective (ie prevention, eradication, containment or asset protection). Refer WeedWise for specific requirements.

GBD IS NOT TRIGGERED

GBD does not apply and the landholder is not required to undertake any actions to discharge their GBD for any biosecurity risk posed by the plants. Landholder may choose to control weeds beyond the requirements of their GBD.

GBD IS NOT TRIGGERED

GBD does not exist until information is provided. LCA should consider

- Providing advice and education, or
- Arranging a contractor for the elderly or infirm

GBD IS TRIGGERED

Actions to discharge GBD as far as reasonably practicable, for example:

- suppress and destroy the plant on the land, or
- prevent spread from the land, eg. By creating a weed free buffer zone

Landholder may choose to control weeds beyond the requirements of their GBD.

GBD IS NOT TRIGGERED

Landholder may choose to control weeds beyond the requirements of their GBD.



GBD IS TRIGGERED

Landholder is required to discharge their GBD by managing the plant to reduce its extent on their land to no greater than that occurring on neighbouring lands as far as reasonably practicable. Landholder may choose to control weeds beyond the requirements of their GBD.

Regional Strategic Weed Management Plan 2017 - 2022

