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# Local Priority Weed Management Plan 2019-2024

A shared responsibility for Biosecurity

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Local Priority Weed Management Plan City of Ryde 2019-2024

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing in August 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 City of Ryde.

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### Introduction

All councils have a legislative obligation to monitor and manage weeds as identified under the *Biosecurity Act 2015*.

The aim of the NSW Biosecurity Act 2015 is to protect the economy, environment and community from the negative impact of pests, diseases and weeds. In line with new Commonwealth biosecurity measures (the **Australian Weeds Strategy, the International Agreement on Biosecurity and the NSW Invasive Species Plan)** NSW has reformed its weed legislation. Together, the NSW Biosecurity Strategy 2013-2021 and NSW Biosecurity Act 2015 (which has replaced the NSW Noxious Weeds Act 1993) provide clear framework aimed at a community-wide shared responsibility for biosecurity.

Weeds have a negative impact on landscapes, natural areas, highly significant environmental areas, people and the economy. Weeds put the natural environment under intense pressure as they invade bushland and waterways, out-compete native species and alter natural habitats of native plants and animals.

Local councils, state government agencies, community groups, volunteers and some individual landowners do significant work in managing weeds. Although there is a willingness by most to address the problems associated with weeds many, particularly Councils and government agencies, are faced with constraints in achieving a significant and long-term reduction of weeds. These constraints include; limited resources, competing priorities of core business, difficulties in coordination of many land managers, lack of community awareness and difficulty in eradicating some persistent weed species.

This Local Priority Weed Management Plan as developed by City of Ryde is a guide for land management focusing on local weed issues and controlling widespread weeds across the landscape. It focuses on managing state, regional and local priority weeds to improve the natural environment across City of Ryde and outlines how land managers might meet their General Biosecurity Duty under the NSW Biosecurity Act 2015.

Effective and long-term weed management by Councils, agencies and all other stakeholders is complex and challenging. The vision for this plan is:

To support a collaboration of government, industry and the community working together to protect the natural environment, economy and local area from the negative impacts of local priority weeds. The goals, objectives and outcomes for this plan align with the Greater Sydney Regional Strategic Weed Management Plan 2017-2022, which deals with state and regional priority weeds and provides the overarching policy framework.

The goals for this Local Priority Weed Management Plan are:

- Goal One: Weed biosecurity is a shared responsibility that supports a community approach to local weed management
- Goal Two: Local weed biosecurity that protects the subregion and prevents new weeds from entering the region.
- Goal Three: Enhance the regions capacity to support a collaborative tenure-neutral approach to improve effective local weed control

This plan provides a framework for achieving these goals over the next 5 years.

### **Policy and Legislative Setting**

This plan sits in the implementation stage of the framework depicted in Figure 1.



Overall planning framework for the Greater Sydney Regional Strategic Weed Management Plan 2017-2022.

The Greater Sydney Regional Strategic Weed Management Plan 2017-2022 (GSRSWMP) provides a coherent framework from which to build a sure direction to follow. It gives land managers confidence and increases the transparency of our work delivered. This Local Priority Weed Management Plan, on the other hand, is much more flexible and open for adaptation and change when needed. While this plan supports the goal and actions of the GSRSWMP in tackling weeds listed as Appendix 1 and 2, it provides goals and actions for those weeds listed as Appendix 3 which are described as local priority weeds to successfully and consistently manage identified weeds.

### **Greater Sydney region**

#### Greater Sydney region

The Greater Sydney region covers 12,474 km<sup>2</sup>, supports approximately 4.6 million people and encompasses 34 local government areas. Sydney is Australia's largest city and the gateway to NSW. All of Sydney is recognised as a biosecurity high risk area potentially enabling the establishment and spread of weeds to and from the region

Much of Sydney's bushland and waterways are threatened by weeds and are under constant pressure, in the Greater Sydney region, weeds impact on:

**Biodiversity** – in urban bushland and natural areas, including threatened species, populations and ecological communities;

**Social environment** – enjoyment of natural and outdoor areas, recreation e.g. waterways, foreshores, access into bushland areas, visual amenity (weed infestations can be perceived as an eyesore);

Human health - some weed species have impacts on human health conditions such as asthma;

Economy – agriculture, fisheries, movement of people and vehicles.

If not managed, these weeds cause damage to many areas of bushland and high conservation areas, coastal foreshores, harbours, waterways, sand dunes and agriculture (GSRSWMP).



Sydney Weeds Networks – The Sub-networks of the Greater Sydney Region.

### Sydney Central Sub-network

The Sydney Central Sub-network is made up of 11 local Councils (Canterbury Bankstown, City of Ryde, City of Canada Bay, Cumberland, Georges River, Hornsby Shire, Hunters Hill, Inner West, Ku-ring-gai, Lane Cove, Strathfield), This sub-network contains a wide range of habitat types, ranging from forests and woodlands, through to coastal heathland, mangroves and saltmarshes. All these areas warrant conservation management, but some attract higher priority for consideration in weed control programs either because of their status under the *Biodiversity Conservation Act 2016*, support through local management plans or because large proportions of the habitat occurring within the area are threatened by weed invasion.

A number of plant and animal species and ecological communities occurring within the central region are listed under the *Federal Environment Protection and Biodiversity Conservation Act 1999*, and *NSW Biodiversity Conservation Act 2016*. These, along with any state or regionally significant species and communities, have been (or are being) identified in surveys and plans prepared by the individual management bodies.

A higher priority for weed management within the Sydney Central sub-network is required where any threatened species or communities occur in locations susceptible to weed invasion (such as creek lines, areas of impeded drainage, urbanised ridges or upper slopes). One of the main objectives for weed management in the central sub-network is for the protection of biodiversity and remnant bushland assets.

The other stakeholders involved in weed management in Sydney Central include:

State and Federal Government agencies:

- Department of Primary Industries;
- Office of Environment and Heritage;
- National Parks and Wildlife Service;
- Sydney Water Corporation;
- Sydney Trains/ Transport NSW
- Roads and Maritime Services;
- Department of Lands; and
- Department of Defence.

Owners and occupiers of land

Private owners and occupiers of land

Community and non-government groups

- Community volunteers working as part of Bushcare/Landcare programs and incorporated community groups
- Indigenous community volunteers working with Aboriginal Land Council programs, incorporated groups and non-government organisations
- > Nursery & Garden Industry Association NSW & ACT "Grow Me Instead" project
- > Australian Association of Bush Regenerators (AABR), contractors



Sydney Weeds Central Sub-Network.

### **Priority Weeds**

Weeds classification for management is now divided into three priority categories:

- 1. State
- 2. Regional
- 3. Local

State and regional priority weeds were identified through the Biosecurity Act 2015 and the the *Greater Sydney Regional Strategic Weed Management Plan 2017-2022* where the 'Invasion Curve' is key and the outcomes for these weeds demonstrate compliance with the General Biosecurity Duty.



#### The Weed Invasion Curve (Source: NSW Invasive Species Plan 2018-2021)

This curve illustrates the relationship between the stages of weed invasion and the level of effective control that could be expected. As such, City of Ryde aligns outcomes for addressing priority weeds with best practice measures which aim to target weeds in the beginning of the invasion curve before weeds dominate the landscape. Bushcare and contractors are the only key active management tools at present.

In addition to the 'Invasion Curve' weeds need to be prioritised utilising a consistent and systematic process to achieve the greatest benefit of risk management. City of Ryde adopts the approach recommended by the NSW Department of Primary Industries (Biosecurity Weed Management Policy IND-O-214 2017) which introduces the nationally accepted NSW Weed Risk Assessment System that measures a weed's risk potential. This tool was used to create Appendix 3 Local priority weeds and is included as Appendix 4 of this plan.

Although comprehensive, the state and regional priority weeds lists do not address other weeds that directly impact City of Ryde which are of local priority. Consistent with the goals of the Greater Sydney Regional Strategic Weed Management Plan 2017-2020 and the Biosecurity Act 2015, we have outlined our objectives and responses to identified local priority weeds. A collaborative and consistent approach to manage these weeds will provide the best outcome for local and subregional areas.

State, regional and local priority weeds identified are subject to the General Biosecurity Duty and are the focus for this plan. These weeds will be the subject of coordinated weed control campaigns by the community and other stakeholder groups in the subregion.

The management actions 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, potential pathways for infestation and the distribution in the subregion and size of infestation. These factors were considered in determining the suite of desired outcomes to demonstrate compliance with the General Biosecurity Duty and strategic responses.

Consistent with the criteria set out above, a range of weed species have been prioritised at a State, Regional and Local level, and are referenced from the following instruments and documents.

Biosecurity Act 2015 Biosecurity Regulations 2017 Biosecurity (Boneseed) Control Order 2017 Biosecurity (Tropical Soda Apple) Control Order 2017 Biosecurity (Parkinsonia) Control Order 2017 Greater Sydney Regional Strategic Weed Management Plan

The weeds listed in the above instruments and documents have all been included in the City of Ryde Priority Weeds list as Appendix 1 (State Priority Weeds), Appendix 2 (Regional Priority Weeds) and Appendix 3 (Local Priority Weeds) of this plan respectively.

As with all components of the *Greater Sydney Regional Strategic Weed Management Plan 2017-2022*, these obligations apply to all private and public landholders in the subregion.

### **Regulatory Action**

Inspections and surveillance work will be guided by State, Regional and Local Weed Plans. These will indicate priority weed species and expected management outcomes. In the City of Ryde, assets that have rich biodiversity and connectivity are identified as areas requiring resources. In addition, high risk pathways and sites that may accelerate the transportation of priority weeds to other areas are identified for both regulatory and non-regulatory inspections and surveillance.

The General Biosecurity Duty (GBD) is a key feature of the Biosecurity Act 2015. Simply put, it means any person who deals with plant matter (who ought to know) must take measures to prevent, eliminate or minimise the biosecurity risk that it poses as reasonably practicable.

City of Ryde's management priority is not to enforce the Biosecurity act 2015 for control of widespread low risk weeds or weeds not listed in schedule 1, 2 and 3.

If a new weed is suspected of being found, the new weed incursion procedure outlined in the Greater Sydney Region New Incursion Plan 2017-2022 will be followed.

#### Recording

It is essential for all organisations that accurate and timely reporting of all weed surveillance, inspections, mapping and treatment is recorded. A property inspection form or file note (electronic or paper) should be used to record all private property inspections to capture the relevant information regarding any weeds on a property. All mapping data should be entered into Sydney WeedAPP; this information will then be sent to the Department of Primary Industries' BIS for regional and local reporting purposes.

#### Processes

A weed inspectorial process guide is in the table below to assist authorised officers in determining appropriate enforcement actions as guided by *the Biosecurity Act 2015*.



### Plan and review

As local priority weeds change they can either be added or removed from this plan. This plan will be reviewed and an evaluation of the effectiveness will be coordinated by the Sydney North subregional weeds committee at the end of 2020.

New weeds will be added to this list accordingly once a risk assessment has been done to determine the risk and agreed by key weed management bodies.

### References

Greater Sydney Regional Strategic Weed Management Plan 2017-202 https://greatersydney.lls.nsw.gov.au/\_\_data/assets/pdf\_file/0010/722368/Greater-Sydney-Regional-Weed-Mgmt-Plan-29-June-2017\_FINAL-web-res.pdf

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

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.

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

Weed Strategy Sydney Metropolitan CMA

Priority Weeds Schedule Blue Mountains Council

Sydney Weed App Local Land Services Greater Sydney

### Glossary

**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 parks.

**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.

**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.

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

**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.

**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).

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.

**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.

### List of Abbreviations

- BIS Biosecurity Information System
- DPI NSW Department of Primary Industries
- GBD General Biosecurity Duty
- ISP NSW Invasive Species Plan 2015-2022
- LLS Local Land Services
- MERI Monitoring, evaluation, reporting and improvement
- OEH NSW Office of Environment and Heritage
- NPWS NSW National Parks and Wildlife Service
- GSRSWMP Greater Sydney Regional Strategic Weed Management Plan
- RWC Regional Weed Committee
- WAP NSW Weeds Action program

# **Appendix 1: State level priority weeds (excerpt from GSRSWMP)**

Species	Biosecurity Act requirements & Strategic Response in the region
All species of vascular plant (Tracheophyta)	<ul> <li>Mandatory Measure (Division 8, Clause 34) Duty to notify on importation of plants into the State:</li> <li>(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.</li> <li>(2) The notification is to be given to the Secretary and is to be given in accordance with Part 6.</li> <li>(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.</li> <li>Note. See http://plantnet.rbgsyd.nsw.gov.au/.</li> <li>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.</li> </ul>
Gamba grass - Andropogon gayanus	
Pond apple - Annona glabra	
Bridal veil creeper - Asparagus declinatus	
Kochia - Bassia scoparia (excluding subsp. trichophylla)	
Spotted knapweed - Centaurea stoebe subsp.australis	
Black knapweed - Centaurea x moncktonii	
Siam weed - Chromolaena odorata	
Koster's curse - Clidemia hirta	Prohibited Matter (Part 4, Biosecurity Act, 2015): A person who deals with any biosecurity matter
Rubber vine - Cryptostegia grandiflora	that is Prohibited Matter throughout the State is guilty of an offence.
Anchored water hyacinth - Eichhornia azurea	<b>Regional Strategic Response:</b> Manage in accordance with the New Weed Incursion Plan.
Hawkweed - Hieracium spp (all species)	
Hydrocotyl/Water pennywort - Hydrocotyle ranunculoides	
Lagarosiphon - Lagarosiphon major	
Frogbit / Spongeplant - Limnobium spp. (all species)	
Yellow burrhead - <i>Limnocharis flava</i>	
Miconia - Miconia spp. (all species)	
Mikania vine - Mikania micrantha	

<b>State Priority Weed Objective – PREVENTION:</b> 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 - Myriophyllum spicatum		
Mexican feather grass - Nassella tenuissima (syn. Stipa tenuissima)		
Broomrape - Orobanche spp. (all species except the native O. cernua var. australiana and O. minor)	<b>Prohibited Matter (Part 4, Biosecurity Act, 2015):</b> A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.	
Water soldier - Stratiotes aloides		
Witchweed - Striga spp. (except the native S. parviflora)	<b>Regional Strategic Response:</b> Manage in accordance with New Weed Incursion Plan.	
Water caltrop - Trapa spp. (all species)		
Karoo acacia - Vachellia karroo (syn. Acacia karroo)		
Prickly acacia - Vachellia nilotica (syn. Acacia nilotica)		
Parthenium Weed - <i>Parthenium hysterophorus</i>	<ul> <li>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.</li> <li>Mandatory Measure (Division 8, Clause 35, Biosecurity Regulation, 2017) - Parthenium weed carriers – machinery and equipment</li> <li>(1) This clause applies to the following equipment: <ul> <li>(a) grain harvesters (including the comb or front),</li> <li>(b) comb trailers (including the comb or front),</li> <li>(c) bins used for holding grain during harvest operations</li> <li>(d) augers or similar equipment used for moving grain</li> <li>(e) vehicles used for transporting grain harvesters</li> <li>(f) vehicles used as support vehicles with grain harvesters and that have been driven in paddocks during harvest operations, and</li> <li>(g) mineral exploration drilling rigs and vehicles used for transporting those rigs.</li> </ul> </li> <li>(2) A person must not import into the State from Queensland any equipment to which this clause applies</li> <li>Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.</li> </ul>	

<b>State Priority Weed Objective – ERADICATION:</b> 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	
Boneseed -Chrysanthemoides monilifera subspecies monilifera	Biosecurity (Boneseed) Control Order 2017         6. Control measures for owners and occupiers of land         Pursuant to section 621(1)(b) of the Act, an owner or occupier of land in the Boneseed Control Zone on which there is Boneseed must: <ul> <li>notify the local control authority for the area if the Boneseed is part of a new infestation on the land:</li> <li>as soon as practicable after becoming aware of the new infestation;</li> <li>the person's full name and contact number;</li> <li>the location of the Boneseed, including the property identification code for the land (if this is known); and</li> <li>any other information reasonably requested by the local control authority; and</li> <li>any other information reasonably requested by the local control authority; and</li> <li>in eavier 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.</li> </ul> <li>Control measures for persons dealing with carriers</li> <li>Pursuant to section 621(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 in the land; and</li> <li>immediately notify the local control authority for the area:         <ul> <li>as soon as practicable after becoming aware of the presence of Boneseed;</li> <li>as soon as practicable after becoming aware of the presence of Boneseed;</li> <li>we rehally on in writing;</li> <li>ii) so soon as practicable after becoming aware of the presence of Boneseed;</li> <li>we rehally on in writing;</li> <li>iii) so a as practicable after becoming aware of the presence of Bone</li></ul></li>	

<b>State Priority Weed Objective – ERADICATION:</b> 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	
Chinese violet - Asystasia gangetica	Biosecurity (Chinese violet) Control Order 2019         Sc. Control measures for owners and occupiers of land         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: <ul> <li>notify the local control authority for the area if the Chinese violet is part of a new infestation on the land:</li> <li>as soon as practicable after becoming aware of the new infestation;</li> <li>werbally or in writing;</li> <li>giving the following:</li> <li>the location of the Chinese violet, including the property identification code for the land (if this is known); and</li> <li>any other information reasonably requested by the local control authority; and</li> <li>immediately destroy all Chinese violet on the land; and</li> <li>ensure that subsequent generations of Chinese violet are destroyed; and</li> <li>the local control authority for the area.</li> </ul> <li>7. Control measures for persons dealing with carriers         <ul> <li>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Chinese violet in the Chinese violet (</li> <li>mediately notify the local control authority:                 <ul> <li>as soon as practicable after becoming aware of the presence of Chinese violet on the land or in or on the carrier, must:</li></ul></li></ul></li>	

Precise         Biosecurity Act 2015 requirements & Strategic Response in the region           Species         Biosecurity (Parkinsonia) Control Order 2017           6. Control measures for owners and occupiers of land in the Parkinsonia Control Zone on which there is Parkinsonia must: <ul> <li>(f) notify the local control authority for the area if the Parkinsonia is part of a new infestation of Parkinsonia on the land:             <li>i) as soon as practicable after becoming aware of the new infestation;             <li>ii) verbally or in writing;             <li>iii) giving the following:                 <ul> <li>(1) the person's full name and contact number;</li> <li>(2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and</li> <li>i) any other information reasonably requested by the local control authority; and</li> <li>(g) immediately destroy all Parkinsonia.</li></ul></li></li></li></li></ul>		ent in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a
Biosecurity (Parkinsonia) Control Order 2017         6. Control measures for owners and occupiers of land         Pursuant to section 52(1)(b) of the Act, an owner or occupier of land in the Parkinsonia Control Zone on which there is Parkinsonia must: <ul> <li>notify the local control authority for the area if the Parkinsonia is part of a new infestation of Parkinsonia on the land:             <li>as soon as practicable after becoming aware of the new infestation;             <li>werbally or in writing;</li> <li>giving the following:</li></li></li></ul>		
	Parkinsonia -	<ul> <li>Biosecurity (Parkinsonia) Control Order 2017</li> <li>6. Control measures for owners and occupiers of land</li> <li>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: <ul> <li>(f) notify the local control authority for the area if the Parkinsonia is part of a new infestation of Parkinsonia on the land: <ul> <li>i) as soon as practicable after becoming aware of the new infestation;</li> <li>ii) verbally or in writing;</li> <li>iii) giving the following: <ul> <li>(1) the person's full name and contact number;</li> <li>(2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and</li> <li>(3) any other information reasonably requested by the local control authority; and</li> <li>(g) immediately destroy all Parkinsonia on the land; and</li> <li>(h) ensure that subsequent generations of Parkinsonia are destroyed; and</li> <li>(i) the land is kept free of Parkinsonia.</li> </ul> </li> <li>(j) 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.</li> </ul> </li> <li>7. Control measures for persons dealing with carriers <ul> <li>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: <ul> <li>(d) ensure that Parkinsonia (including any seed and propagules) is not moved from the land; and</li> <li>(e) mediately notify the local control authority: <ul> <li>(i) as soon as practicable after becoming aware of the presence of Parkinsonia;</li> <li>(ii) verbally or in writing;</li> <li>(iii) as soon as practicable after becoming aware of the presence of Parkinsonia;</li> <li>(i) verbally or in writing;</li> <li>(ii) as soon as practicable</li></ul></li></ul></li></ul></li></ul></li></ul>

State Priority Weed Objectiv	e – ERADICATION:
	t 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
	Biosecurity (Tropical Soda Apple) Control Order 2017
	<b>6. Control measures for owners and occupiers of land</b> 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:
	<ul> <li>(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:</li> </ul>
	i) as soon as practicable after becoming aware of the new infestation;
	ii) verbally or in writing;
	iii) giving the following:
	<ul> <li>(1) the person's full name and contact number;</li> <li>(2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and</li> </ul>
	(3) any other information reasonably requested by the local control authority; and
	(b) destroy all Tropical Soda Apple on the land, including fruit; and
	<ul> <li>(c) ensure that subsequent generations of Tropical Soda Apple are destroyed; and</li> <li>(d) that the land is kept free of Tropical Soda Apple.</li> </ul>
	(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land
Tropical soda apple - Solanum	has already been given to the local control authority for the area.
viarum	7. Control measures for neurons dealing with corriers
	<b>7. Control measures for persons dealing with carriers</b> 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:
	<ul> <li>(a) ensure that Tropical Soda Apple (including any seed and propagules) is not moved from the land; and</li> <li>(b) immediately notify the local control authority for the area:</li> </ul>
	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> <li>(1) the person's full name and contact number;</li> <li>(2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and</li> </ul>
	iv) any other information reasonably requested by the local control authority.
	(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.
	Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan

reasonably practicable.	imination is not practicable, minimisation of the biosecurity risk posed these weeds is
Land area where requirements apply	<i>Biosecurity Act 2015</i> requirements & Strategic Response in the region
Alligator Weed - Alternanthera philoxeroides A biosecurity zone, to be known as the alligator weed biosecurity zone, is established for all land within the State except land in the following regions: (a) Greater Sydney, (b) Hunter (but only in respect of land in the local government area of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens).	<ul> <li>Biosecurity Regulation 2017 - Part 5, Division 2 (Biosecurity Zone)</li> <li>An owner or occupier of land in the alligator weed biosecurity zone on which there is the weed Alternanthera philoxeroides (Alligator weed) must: <ul> <li>(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</li> <li>(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.</li> </ul> </li> <li>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</li> <li>Regional Strategic Response: Refer Appendix 1.2 Containment.</li> </ul>
Bitou Bush - Chrysanthemoides monilifera subsp. rotundata	
A biosecurity zone, to be known as the bitou bush biosecurity zone, is established for all land within the State except land within 10 kilometres of the mean high water mark of the Pacific Ocean between Cape Byron in the north and Point Perpendicular in the South.	<ul> <li>Biosecurity Regulation 2017 - Part 5, Division 3 (Biosecurity Zone)</li> <li>An owner or occupier of land in the bitou bush biosecurity zone on which there is the weed Chrysanthemoides monilifera subsp. rotundata (Bitou bush) must: <ul> <li>(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</li> <li>(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.</li> </ul> </li> <li>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</li> <li>Regional Strategic Response:</li> <li>Manage in accordance with NSW Threat Abatement Plan and Saving Our Species.</li> </ul>
Water Hyacinth Eichhornia crassipes	
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).	<ul> <li>Biosecurity Regulation 2017 - Part 5, Division 4 (Biosecurity Zone</li> <li>An owner or occupier of land in the water hyacinth biosecurity zone on which there is the weed Eichhornia crassipes (Water hyacinth) must: <ul> <li>(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</li> <li>(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.</li> </ul> </li> <li>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.</li> </ul>

Regional Strategic Response: See Appendix 1.2 Containment.

Species	Biosecurity Act 2015 requirements & Strategic Response in the region
Madeira vine - Anredera cordifolia	
Asparagus weeds - Asparagus aethiopicus, †A. africanus, A. asparagoides including the Western Cape form*, A. plumosus, and A. scandens	
‡Cabomba - <i>Cabomba caroliniana</i>	
‡Scotch/English broom - Cytisus scoparius subsp. scoparius	
‡Cat's Claw Creeper - Dolichandra unguis-cati	
Cape/Montpellier broom - Genista monspessulana	
Flax-leaf broom - <i>Genista linifolia</i>	Mandatory Measure (Division 8, Clause33, Biosecurity Regulation 2017): A person
#Hymenachne - Hymenachne amplexicaulis	must not move, import into the State or sell.
Bellyache bush - Jatropha gossypiifolia	Regional Strategic Response:
Lantana - <i>Lantana camara</i>	<ul> <li>Regional Strategic Response:</li> <li>Identify priority assets for targeted management.</li> <li># Refer Appendix 1.2 Prevention.</li> <li>† Refer Appendix 1.2 Eradication.</li> <li>† Refer Appendix 1.2 Containment.</li> <li>‡ Refer Appendix 1.2 Asset Protection.</li> </ul>
African boxthorn - Lycium ferocissimum	
Chilean needle grass - Nassella neesiana	
++Serrated tussock - Nassella trichotoma	
Opuntia- <i>Opuntia</i> spp., <i>Cylindropuntia</i> spp., <i>Austrocylindropuntia</i> spp. (Excludes <i>O. ficus- indica</i> )	
Mesquite - Prosopis spp.	
Blackberry - Rubus fruticosus agg. (Blackberry except the varietals Chester Thornless, Dirksen Thornless, Loch Ness, Silvan, Black Satin, Murrindindi, Smooth Stem, Thornfree and Chehalem)	
Sagittaria - Sagittaria platyphylla	
+Willows - Salix spp.(excludes S.babylonica, S.X calodendron & S. x reichardtiji)	1

<sup>++</sup> Salvinia - <i>Salvinia molesta</i>
Fireweed - Senecio madagascariensis
Silver-leaf nightshade - Solanum elaeagnifolium
Athel pine - Tamarix aphylla
++Gorse - Ulex europaeus

# Appendix 2: Regional priority weeds (excerpt from GSRSWMP)

<b>Regional Priority Weed Objective – PREVENTION:</b> The following weeds are currently not found in the Greater Sydney region, pose significant a reasonably practical objective.	biosecurity risk and prevention of the biosecurity risk posed by these weeds is	
Coral creeper - Barleria repens		
East Indian hygrophila - Hygrophila polysperma		
Giant devil's fig - Solanum chrysotrichum		
Giant rats tail grass - Sporobolus pyramidalis		
Hymenachne - Hymenachne amplexicaulis		
Nodding thistle - Carduus nutans		
Spanish broom - Spartium junceum		
Water lettuce - Pistia stratiotes		
Water star grass - Heteranthera zosterifolia		
White blackberry / Mysore raspberry - Rubus niveus		
Outcomes to demonstrate compliance with the GBD Strategic response in the region		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Local Control Authority is notified if the plant is found on the land</li> </ul>	<ul> <li>Implement quarantine and/or hygiene protocols</li> <li>Undertake high risk sites &amp; pathways analysis to identify potential introduction areas and preventative options</li> <li>Have a collaborative rapid response protocol in place</li> <li>Supporting documents: New Weed Incursion Plan (includes rapid response protocol) Look, Learn, Act Community awareness program</li> </ul>	

Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Black willow - Salix nigra	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>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.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Climbing asparagus - Asparagus africanus	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>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.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Chinese knotweed - Persicaria chinensis	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Glory lily – <i>Gloriosa superba</i>	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>

Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Grey sallow – Salix cinerea	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>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.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Groundsel bush – Baccharis halimifolia	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene controls.</li> </ul>
Hygrophilla - Hygrophilla costata	
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Kei apple - Dovyalis caffra	·
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> </ul>
Kidney leaf mud plantain - Heteranthera reniformis	· · · · · · · · · · · · · · · · · · ·
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>

• The plant is eradicated from the land and the land is kept free of the plant.	•	Destruction of all infestations where feasible.
<ul> <li>Local Control Authority is notified if the plant is found on the land.</li> </ul>	•	Manage in accordance with New Weed Incursion Plan.
• The plant or parts of the plant are not traded, carried, grown or released into	•	Detailed surveillance and mapping to locate all infestations.
the environment.	•	Implement quarantine and/or hygiene protocols.

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Regional Priority Weed Objective – ERADICATION:		
Outcomes to demonstrate compliance with the GBD	Strategic response in the region	
Leaf cactus - Pereskia aculeata		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	
Ming fern - Asparagus macowanii var. zuluensis		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>High level pathways analysis to identify potential introduction areas and preventative options.</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Monitor progress towards eradication.</li> </ul>	
Mysore thorn - Caesalpinia decapetala		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	
Sicilian sea lavender - Limonium hyblaeum		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	

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Outcomes to demonstrate compliance with the GBD	Strategic response in the region	
Sicklethorn - Asparagus falcatus		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	
Skunk vine - Paederia foetida		
<ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Manage in accordance with New Weed Incursion Plan.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	

	<b>NTAINMENT:</b> <i>These weeds are widely distributed in the dynamics of the by these weeds is reasonably practicable.</i>	region. While broad scale elimination is not practicable,
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
African olive - Olea europaea subsp. cuspida	ta	
An <i>exclusion zone</i> is established for all lands in the Blue Mountains and Central Coast local government areas. The remainder of the region is classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> </ul>	<ul> <li>Whole region:</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives.</li> <li>Monitor change in current distribution to ensure containment of spread.</li> <li>Within Exclusion zone:</li> <li>Destruction of all infestations, aiming at local eradication where feasible</li> <li>Within Core infestation:</li> <li>Identify priority assets for targeted management.</li> </ul>
An <i>exclusion zone</i> is established for all lands in the Blue Mountains local government areas. The remainder of the region is classified as the <i>core infestation</i> <i>area</i> .	<ul> <li>Whole region:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers reduce the impact on priority assets.</li> <li>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</li> <li>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.</li> </ul>	<ul> <li>Blue Mountains LGA:</li> <li>Destruction of all infestations, where feasible.</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Remainder of region:</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Manage in accordance with the Priorities for the control of Alligator Weed in the Sydney Region.</li> </ul>

Regional Priority Weeds objective – CONTAINMENT:		
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Asparagus fern- Asparagus virgatus		
An <i>exclusion zone</i> is established for the whole of the region except Central Coast local government area. Central Coast local government area is classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> </ul>	<ul> <li>Destruction of all infestations where feasible.</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>
Gorse - Ulex - europaeus		
An <i>exclusion zone</i> is established for the Blue Mountains local government area The remainder of the region is classified as the <i>core infestation area</i> .	<ul> <li>Whole region:         <ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Within Exclusion zone:                 <ul> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li></ul></li></ul></li></ul>	<ul> <li>Destruction of all infestations, aiming at local eradication where feasible.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Monitor progress towards eradication.</li> </ul>

Holly-leaved senecio - Senecio glastifolius			
An <i>exclusion zone</i> is established for the whole of the region except the Royal National Park. The Royal National Park is classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation area:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>	

Regional Priority Weeds objective – CONTAINMENT:		
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Horsetails - Equisetum spp.		
An <i>exclusion zone</i> is established for whole of region except Northern Beaches local government area. The Northern Beaches local government area is classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation area:</li> <li>Land managers prevent spread from their land where feasible.</li> </ul>	<ul> <li>Destruction of all infestations, where feasible.</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>
Salvinia - Salvinia molesta		
An <i>exclusion zone</i> is established for the whole of the region except the Georges and Hawkesbury-Nepean Rivers and their tributaries. The Georges and Hawkesbury- Nepean Rivers and tributaries are classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Core infestation area:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>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.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>

Regional Priority Weeds objective – CONTAINMENT:		
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Sea spurge - Euphorbia paralias		
An <i>exclusion zone</i> is established for whole of region except Sutherland local government area. Sutherland local government area is classified as the <i>core</i> <i>infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Core infestation:</li> <li>Land managers prevent spread from their land where feasible.</li> </ul>	<ul> <li>Destruction of all infestations, where feasible.</li> <li>Detailed surveillance and mapping to locate all infestations.</li> <li>High level pathways analysis to identify potential introduction areas and preventative options.</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Monitor progress towards eradication.</li> </ul>
Senegal tea - Gymnocoronis spilanthoides		
An <i>exclusion zone</i> is established for the whole of the region except Central Coast LGA, Royal National Park and the Hawkesbury-Nepean River and its tributaries. Central Coast LGA, Royal National Park and the Hawkesbury-Nepean River and its tributaries are classified as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation area:</li> <li>Land managers prevent spread from their land where feasible.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>

Regional Priority Weeds objective – Co	ONTAINMENT:	
Land area where requirements apply	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Serrated tussock - Nassella trichotoma		
An <i>exclusion zone</i> is established for all lands in the region, excluding areas comprising Wollondilly and Camden local government areas, which will be known as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.</li> </ul>	<ul> <li>Monitor change in current distribution to ensure containment of spread.</li> <li>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.</li> <li>Within Exclusion zone:</li> <li>The plant should be fully and continuously supressed and destroyed.</li> </ul>
Tiger pear- Opuntia aurantiaca		
An <i>exclusion zone</i> is established for the whole region except Blacktown and Wollondilly local government areas. Blacktown and Wollondilly local government areas are classified as the <i>core infestation area.</i>	<ul> <li>Whole region:</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Within Core infestation:</li> <li>Land managers mitigate the risk of the plant being introduced to their land and reduce the impact on priority assets.</li> <li>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017)</li> </ul>	<ul> <li>Destruction of all infestation, where feasible.</li> <li>Monitor change in current distribution to ensure containment of spread.</li> </ul>

Water poppy - Hydrocleys nymphoides		
An <i>exclusion zone</i> is established for all lands (and waters) in the region, excluding areas comprising the Hacking River Catchment, which will be known as the <i>core infestation area</i> .	<ul> <li>Whole region:</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment</li> <li>Within Exclusion zone:</li> <li>The plant is eradicated from the land and the land is kept free of the plant.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> <li>Within Core infestation:</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers prevent spread from their land where feasible.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Monitor change in current distribution to ensure containment of spread.</li> <li>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.</li> <li>Within Exclusion zone:</li> <li>The plant should be fully and continuously supressed and destroyed.</li> </ul>
Regional Priority Weed Objective – ASSET PROTECTION:		
---	---	
Outcomes to demonstrate compliance with the GBD	Strategic response in the region	
Cat's claw creeper - Dolichandra unguis-cati		
<ul> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers reduce the impact on priority assets.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Identify priority assets for targeted management</li> <li>Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive</li> </ul>	
<i>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33):</i> A person must not move, import into the State or sell.	vegetation/crops/pastures, hygiene and property management plans.	
Cabomba - <i>Cabomba caroliniana</i>		
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	
<i>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33):</i> A person must not move, import into the State or sell.		
Giant reed – Arundo donax		
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	
Green cestrum - Cestrum parqui		
<ul> <li>Land managers mitigate the risk of the plant being introduced to land used for grazing of livestock.</li> <li>Land managers prevent spread from their land where feasible.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed on grazing land</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>	

Regional Priority Weed Objective – ASSET PROTECTION:							
Outcomes to demonstrate compliance with the GBD	Strategic response in the region						
Pampas grass - <i>Cortaderia jubata</i>							
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed.</li> <li>Identify priority assets for targeted management</li> </ul>						
Scotch/English Broom - Cytisus scoparius							
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers reduce the impact on priority assets.</li> </ul> The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.	• 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 - Sphagneticola trilobata							
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers reduce the impact on priority assets.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul>	<ul> <li>Manage in accordance with New Weed Incursion Plan</li> <li>Implement quarantine and/or hygiene protocols.</li> <li>Identify priority assets</li> <li>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.</li> </ul>						
Water hyacinth - Eichhornia crassipes							
<ul> <li>Land managers prevent spread from their land where feasible.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell.</li> <li>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.</li> </ul>	<ul> <li>Develop and implement Community Campaign</li> <li>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.</li> </ul>						

Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Willow-leaf primrose/ Water primrose - Ludwigia peruviana	
<ul> <li>Land managers mitigate the risk of the plant being introduced to their land.</li> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> <li>Local Control Authority is notified if the plant is found on the land.</li> </ul>	<ul> <li>The plant should be fully and continuously suppressed and destroyed.</li> <li>Identify priority assets for targeted management.</li> </ul>

### Appendix 3: Local priority weeds (developed by City of Ryde)

Local Priority Weeds			
Local priority weed name	Objective	Outcomes to demonstrate compliance with the GBD	Strategic response in the Local area
<b>Coolatai grass-</b> Hyparrhenia hirta	<b>Eradication</b> To permanently remove the species and its propagules from the local area with the aim of local eradication	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.	<ul> <li>Destruction of all infestations where feasible</li> <li>Detailed surveillance and mapping to locate infestations</li> </ul>
Arum Lily- Zantedeschia aethiopica Cape ivy- Delairea odorata Rhus tree- Toxicodendron succedaneum Tussock paspalum- Paspalum quadrifarium St John's wort – Hypericum perforatum	<b>Containment</b> To prevent the ongoing spread of the species in all or part of the Local Area	The plant or parts of the plant are not carried, grown or released into the environment	<ul> <li>The plant should be continuously supressed and destroyed</li> <li>Monitor change in current distribution to ensure containment of spread</li> <li>Identify priority assets for targeted management</li> </ul>
Asthma weed- parietaria judaica Balloon vine- Cardiospermum grandiflorum Box elder- Acer negundo Cassia, Senna- Senna pendula Corky passionflower- Passiflora suberosa Japanese honeysuckle- Lonicera japonica Morning glory spp- Ipomoea indica, Ipomoea cairica, Ipomoea purpurea Mother of millions- Bryophyllum species Moth vine- Araujia sericifera Ochna- Ochna serrulata Pampas lily of the valley- Salpichroa origanifolia Privet spp- Ligustrum sinense, Ligustrum lucidum, Ligustrum vulgare Rhizomatous bamboo – Phyllostachys nigra, Phyllostachys aurea Turkey Rhubarb- Acetosa sagittata Wild tobacco- Solanum mauritianum	Asset Protection To prevent the spread of weeds to key sites/assets of high environmental value, or to reduce their impact on these sites if spread has already occurred	Promote best practice principles to landholders, including a range of control techniques for integrated weed management	Identify priority assets for targeted management

## **Appendix 4: Weed Risk Assessment Form**



# NEW SOUTH WALES WEED RISK MANAGEMENT SYSTEM



INDUSTRY AND INVESTMENT NEW SOUTH WALES ORANGE NSW 2800

August 2009

# NEW SOUTH WALES WEED RISK MANAGEMENT FORM

### INTRODUCTION

The NSW Weed Risk Management (WRM) system aims to provide a standard, nationally accepted and transparent process to help make decisions about the introduction, prioritisation and declaration of potential weed or weed species. It has been designed so that it can be applied to a number of geographic scales, for example it can be applied to the state of New South Wales, to regions or catchments, or to individual Local Control Areas, and may even be applied to individual land management units, for example a farm or a National park.

This document contains the assessment form for the NSW WRM system. It is important that this form be submitted with declaration applications.

#### "How do I fill in the form?"

This assessment form is filled out after referring to the instructions contained in the New South Wales Weed Risk Management Guide. It is important to use accurate information to complete this form. To enable this, useful information sources are listed in the **Sourcing information** (page **Error! Bookmark not defined.**) and **Information sources** (page **Error! Bookmark not defined.**) sections of the guide.

#### "Is there any other information that I should provide?"

Aside from the answers required in this form, it is important to provide a copy of the source of the information (page **Error! Bookmark not defined.**) of the guide. Failure to supply information may result in the assessment being sent back to the assessor/s.

#### "What do I do with the completed form?"

The completed form and any additional information should be sent prior to 30 June annually to be considered that year to: -

NWAC Secretary Weeds Unit New South Wales Department of Industry and Investment Locked Bag 21 ORANGE NSW 2800

Alternatively Fax: 02 6391 3206 (and post the original)

Assessments may not be processed in the year of submission if they are received after 30 June.

NSW DII will advise you of the outcome of the assessment.

# NEW SOUTH WALES WEED RISK MANAGEMENT FORM

### **Contact Assessors details**

Contact Assessor's Name	:
Company/Organisation:	
Telephone Number:	
Fax Number:	
Postal Address:	

Assessment working group (stakeholders and experts who helped conduct assessments):


### **General weed information**

Genus:	
Species:	
Common Name(s):	
Family:	
Subspecies/Variety/Cultiva	ar
Management Area:	
Land use:	

### Assumptions

### Invasiveness

1. What is the ability of the weed to establish amongst existing plants?						
very high	"Seedlings" establish within dense vegetation or weeds.	SCORE 3				
high	"Seedlings" establish within open vegetation or weeds.	2				
medium	"Seedlings" establish after moderate disturbance.	1				
low	"Seedlings" mainly need bare ground to establish.	0				
do not know		1.5				
Source and comments						

### 2. What is the weed's tolerance to average weed management practices in the land use?

very high	95% + weeds survive common management.	SCORE 3
high	Between 50 and 95% of weeds survive.	2
medium	Between 5 and 50% of weeds survive.	1
low	Less than 5% of weeds survive.	0
do not know		1.5

### Source and comments

### 3. What is the reproductive ability of the weed in the land use?

(a) Time to seeding		(b) Annual seed production		(c) Vegetative reprod	uction
1 year or less	2	high	2	frequent	2
>1 to 3 yrs	1	low	1	infrequent	1
>3 yrs/never	0	none	0	none	0
do not know	1	do not know	1	do not know	1
				Total score (a+b+c) 5 or 6 3 or 4 1 or 2	SCORE 3 2 1
				0	0

#### Source and comments

	In	vasive	ness G	luesti	on sco	ores	'Do not know' scores									
Γ	Q1	Q2	Q3			Total	Q1	Q2	Q3a	Q3b	Q3c					Total

### 4. How likely is long-distance dispersal (>100 m) by natural means?

	(a) Flying animals	(b) Other wild animals	(c) Water	(d) Wind
common	2	2	2	2
occasional	1	1	1	1
unlikely	0	0	0	0
do not know	1	1	1	1
			Total score (a+b+c+d)	SCORE
			6, 7 or 8	3
			3, 4 or 5 1 or 2	2
			0	0

### Source and comments

### 5. How likely is long-distance dispersal (>100 m) by human means?

	(a) Deliberate spread by people	(b) Accidentally by people and vehicles	(c) Contaminated produce	(d) Domestic/farm animals
common	2	2	2	2
occasional	1	1	1	1
unlikely	0	0	0	0
do not know	1	1	1	1
			Total score (a+b+c+d)	SCORE
			6, 7 or 8	3
			3, 4 or 5	2
			1 or 2	1
•			0	0
Source and co	omments			

Source and comments

Invasiveness Question scores									"[	Do not k	now' sc	ores							
Q1	Q2	Q3	Q4	Q5	Total	Q1	Q2	Q3a	Q3b	Q3c	Q4a	Q4b	Q4c	Q4d	Q5a	Q5b	Q5c	Q5d	Total

### Impacts

### 1. Does the weed reduce the establishment of desired plants?

1. 2005		SCORE
>50% reduction	More than 50% of desired plants do not establish.	3
10-50% reduction	Between 10 and 50% of desired plants do not establish.	2
<10% reduction	Less than 10% of desired plants do not establish.	1
no reduction	Establishment unaffected.	0
do not know		1.5

### Source and comments

### 2. Does the weed reduce the yield or amount of desired vegetation?

21 2000 000 000 000 000		SCORE
>50% reduction	More than 50% reduction in desired plants yield/amount.	300RE 4
25-50% reduction	Between 25 and 50% reduction in yield/amount.	3
10-25% reduction	Between 10 and 25% reduction in yield/amount.	2
<10% reduction	Less than 10% reduction in desired plants yield/amount.	1
no reduction	Desired plant yield or amount is unaffected.	0
do not know		2

### Source and comments

# 3. Does the weed reduce the quality of products, diversity or services available from the land use?

iigh	Severe reductions.	SCORE 3
medium	Substantial reductions.	2
low	Slight reductions.	1
none	No reduction.	0
do not know		1.5

### Source and comments

Invasiveness scores Impact Question scores				es		'Do not know' scores										
Q	uestions	Uncert	Q1	Q2	Q3			Total	Q1	Q2	Q3					Total

high	Major impediment and almost always impenetrable.	SCORE 3
medium	Moderate impediment and sometimes impenetrable.	2
low	Never impenetrable but causes some obstruction.	1
none	No effect on physical movement	0
do not know		1.5

### 4. What is the weed's potential to restrict the physical movement of people, animals, vehicles, machinery and/or water?

#### Source and comments

5.	What is the weed's potential to negatively affect the health of animals and/or	people?
		SCORE

5. What is the weed's potential to negatively affect the health of animals and/or people?								
high	Highly toxic and frequently causes death/severe illness.	SCORE 3						
medium	Occasional significant injuries/illness and/or death.	2						
low	Slight injury or mild illness with no lasting effects.	1						
none	No affect on human or animal health.	0						
do not know		1.5						

Source and comments

### 6. Does the weed have major positive or negative effects on environmental health?

	major positive effect	major negative effect	minor or no effect	do not know
(a) food/shelter	-1	$\frac{1}{\Box}$		0.5
(b) fire regime				
(c) altered nutrient levels				
(d) soil salinity				
(e) soil stability				
(f) soil water table				
			Total score (a+b+c+d+e+f)	SCORE
			`	3
			2-3	2
			0.5-1.5	1
0	4 -		0 or less	0

#### Source and comments

Invasivene	ess scores		Impact Question scores							
Questions	Uncertainty	Q1	Q2	Q3	Q4	Q5	Q6	Total		
				'Do not	know' score	S				
Q1	Q2	Q3	Q4	Q5	Q6a	Q6b	Q6c	Q6d	Q6e	Q6f

### **Potential distribution**

Within the geographic area being considered, what is the percentage area of land use that is suitable for the weed?

>80% of land use	Weed has potential to spread to 80%+ of land use.	SCORE 10
60-80% of land use	Weed has potential to spread to 60-80% of land use.	8
40-60% of land use	Weed has potential to spread to 40-60% of land use.	6
20-40% of land use	Weed has potential to spread to 20-40% of land use.	4
10-20% of land use	Weed has potential to spread to 10-20% of land use.	2
5-10% of land use	Weed has potential to spread to 5-10% of land use.	1
<5% of land use	Weed has potential to spread to less than 5% of land use.	0.5
unsuited to land use	Weed not suited to growing in any part of land use.	0
do not know		5
0		

### Source and comments

(Please attach relevant maps if information is not published)

Γ	Invasivene	ess scores	Impact	scores	Potential distribution scores			
Γ	Questions Uncertainty		Questions Uncertainty		Question Uncertaint			
Γ								

### **Comparative Weed Risk and Uncertainty Scores**

The score for weed risk is calculated by adjusting the Invasiveness, Impacts and Potential distribution scores to range from 0 to 10, and then multiplying these. Weed risk will have a maximum of 1000 and a minimum of 0. The electronic form does this for you.

To calculate manually, adjust the raw scores as follows:						
Invasiveness:	Divide by 15 and multiply by 10. Round score to nearest decimal place.					
Impacts:	Divide by 19 and multiply by 10. Round score to nearest decimal place.					
Potential distribution:	Leave score unchanged.					
<b>Comparative Weed Risk = Invasiveness</b> × <b>Impacts</b> × <b>Potential distribution</b> (Round to the nearest whole number)						

Splitting up these possible scores into bands of 20% gives cut-offs for categories of weed risk as follows:

#### Frequency bands and weed risk Categories

Frequency band	Weed Risk Score	Weed Risk
80-100% (top 20% of possible scores)	192+	Very high
60-80%	101-192	High
40-60%	39-100	Medium
20-40%	13-38	Low
0-20% (bottom 20% of possible scores)	<13	Negligible

#### Weed Risk scores

	Raw score	Correction	Adjusted score	
Invasiveness		((Raw score)/15) x 10	(a)	
Impacts		((Raw score)/19) x 10	(b)	
Potential Distribution		Unchanged	(c)	
Comparative Weed Risk				i.e. (a) x (b) x (c)
Weed Risk Category (from frequency band table above)				(e.g. Very high)

The uncertainty score for weed risk assessment is determined by calculating the percentage of 'do not know' answers that have been recorded in the **Invasiveness**, **Impacts** and **Potential distribution** sections. In the case of part questions, for example Invasiveness Questions 3-5 and Impacts Question 6 record the individual scores from each 'do not know' question in each part to determine the section uncertainty score. **Do not** combine the scores from each 'do not know' question to calculate a score for that question as was done to calculate the question score. See page **Error! Bookmark not defined.** for an example. The electronic form does this for you.

To calculate manually, adjust the section uncertainty score as follows:						
Invasiveness:	Divide by 14 and multiply by 100. Round to nearest whole number.					
Impacts:	Divide by 11 and multiply by 100. Round to nearest whole number.					
Potential distribution:	Divide by 5 and multiply by 100.					
	(Round to the nearest whole number)					

### Weed Risk uncertainty scores

	Section uncertainty score	Correction	Adjusted uncertainty score
Invasiveness		((Raw score)/14) x 100	
Impacts		((Raw score)/11) x 100	
Potential Distribution		((Raw score)/5) x 100	

### **Control costs**

1. How detectable is the weed?

(a) Distinguishing features		(b) Period of year shoot growth vi	sible
non-descript	2	<pre>&lt;4 months</pre>	2
sometimes distinct	1	4-8 months	1
always distinct	0	>8 months	0
do not know	1	do not know	1
(c) Height at maturity		(d) Pre-reproductive height in relation to other vegetation	ation
<0.5 m	2	below canopy	2
0.5-2 m	1	similar height	1
>2 m	0	above canopy	0
do not know	1	do not know	1
		Total (a+b+c+d)	SCORE
		6, 7 or 8 3, 4 or 5 1 or 2 0	3 2 1 0

### Source and comments

2. What is general accessibility of known infestations at the optimum time of treatment? SCORE								
low	Most sites difficult to access, requiring special equipment.	2 300RE						
medium	Most sites readily accessed, may require extra equipment.	1						
high	All sites readily accessible by conventional methods.	0						
not present	Not known to be present.	0						
do not know		1						
Source and com	iments							

Control cost scores					'Do not know' scores									
Q1	Q2			Total	Q1a	Q1b	Q1c	Q1d	Q2					Total



#### 3. How expensive is management of the weed in the <u>first year</u> of targeted control?

#### Source and comments

4. What is the likely level of participation from landholders/volunteers within the land use at risk? SCORE								
low	Weed management rarely undertaken, beyond capacity.	2 2						
medium	Significant weed management changes needed, within capacity.	1						
high	Minimal weed management changes needed.	0						
do not know		1						

Source and comments

	Control cost scores					'Do not know' scores								
Q1	Q2	Q3	Q4	Total	Q1a	Q1b	Q1c	Q1d	Q2	Q3a	Q3b	Q3c	Q4	Total

### Persistence

1. How effective are targeted management treatments applied to infestations of the weed? SCOR								
low	More than 25% of weeds survive annual targeted treatment/s.	3						
medium	5-25% of weeds survive annual targeted treatment/s.	2						
high	1-5% of weeds survive annual targeted treatment/s.	1						
very high	<1% of weeds survive annual targeted treatment/s.	0						
do not know		1.5						

Source and comments

2. What is the minin	2. What is the minimum time period for reproduction of sexual or vegetative propagules? SCORE						
<6 months	Minimum generation time <6 months.	3					
6-12 months	Minimum generation time 6-12 months.	2					
<1-2 years	Minimum generation time <1-2 years.	1					
>2 years	Minimum generation time >2 years.	0					
do not know		1.5					

#### Source and comments

### 3. What is the maximum longevity of sexual or vegetative propagules?

	inanini iongerny of senan or regenance propagates.	SCORE
>5 years	Propagules remain viable for at least 5 years.	2
2-5 years	Propagules remain viable for 2-5 years.	1
2 years	Propagules remain viable for less than 2 years.	0
do not know		1

Source and comments

Γ	Control cost scores Persistence scores					Do not kn	ow' scores	3				
Γ	Questions	Uncert	Q1	Q2	Q3	Total	Q1	Q2	Q3			Total

	(a) Long-distance (>100 m) dispersal by natural means	(b) Long-distance (>100 m) dis by human means	versal
frequent	2	2	
occasional	1	1	
rare	0	0	
do not know	1	1	
		Total (a+b) 4 2 or 3 1 0	SCORE 3 2 1 0

### 4. How likely are new propagules to continue to arrive at control sites, or to start new infestations?

### Source and comments

Control co	Control cost scores Persistence scores 'Do not know' scores				Persistence scores							
Questions	Uncert	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4a	Q4b	Total

### **Current distribution**

1. What percentag	ge area of the land use in the geographic area is currently infested by the we	
>80% land use	Weed infests more than 80% of land use.	SCORE 10
60-80% land use	Weed infests 60-80% of land use.	8
40-60% land use	Weed infests 40-60% of land use.	6
20-40% land use	Weed infests 20-40% of land use.	4
10-20% land use	Weed infests 10-20% of land use.	2
5-10% land use	Weed infests 5-10% of land use.	1
1-5% land use	Weed infests 1-5% of land use.	0.5
<1% land use	Weed infests less than 1% of land use.	0.1
0% of land use bu 20-40% of area	Weed not known in land use but infests 20-40% of geographic area.	2
0% of land use bu 10-20% of area	ut Weed not known in land use but infests 10-20% of geographic area.	1
0% of land use bu 5-10% of area	It Weed not known in land use but infests 5-10% of geographic area.	0.5
0% of land use bu 1-5% of area	It Weed not known in land use but infests 1-5% of geographic area.	0.1
0% of land use ar <1% of area	Nd Weed not known in land use and infests <1% of geographic area.	0.05
not present	Weed not known to be present in the geographic area.	0
do not know		5
Source and com	ments (Please attach relevant maps or other information if not published)	
2. What is the num	nber of infestations, and weed distribution within the geographic area being	
widespread V	Veed occurs as large and small infestations across most of the geographic area	SCORE a. 2
scattered V	Veed occurs mainly as small infestations across much of the geographic area.	1
restricted V	Veed is localised in a small number of outbreaks within the geographic area.	0

1

0

### Source and comments

not present

do not know

16

Control co	ost scores	Persistence scores		Current distribution scores			'Do not know' scores		
Questions	Uncert	Questions	Uncert	Q1	Q2	Total	Q1	Q2	Total

Weed is not known to be present within the geographic area.

# **Comparative Feasibility of Coordinated Control and Uncertainty scores**

The score for feasibility of coordinated control is calculated by adjusting the Control costs, Persistence and Current distribution scores to range from 0 to 10, and then multiplying these. Feasibility of coordinated control will have a maximum of 1000 and a minimum of 0. The electronic form does this for you.

To calculate manually, adjust the raw scores as follows:						
Control costs:	Divide by 12 and multiply by 10. Round score to nearest decimal place.					
Persistence:	Divide by 11 and multiply by 10. Round score to nearest decimal place.					
Current distribution:	Divide by 12 and multiply by 10. Round score to nearest decimal place.					

Feasibility of coordinated control = Control Costs  $\times$  Persistence  $\times$  Current Distribution

(Round to the nearest whole number)

Splitting up these possible scores into bands of 20% gives cut-offs for categories of feasibility as follows:

#### Frequency bands and weed feasibility of coordinated control categories

Frequency band	Feasibility Score	Weed Feasibility
80-100% (top 20% of possible scores)	113+	Negligible
60-80%	56-113	Low
40-60%	31-55	Medium
20-40%	14-30	High
0-20% (bottom 20% of possible scores)	<14	Very high

### Feasibility of coordinated control scores

	Raw score	Correction	Adjusted score	
Control costs		((Raw score)/12) x 10	(a)	
Persistence		((Raw score)/11) x 10	(b)	
Current Distribution		((Raw score)/12) x 10	(c)	
Comparative Weed Risk				i.e. (a) x (b) x (c)
Weed Feasibility Category (from frequency band table above)				(e.g. Negligible)

The uncertainty score for feasibility of coordinated control is determined by calculating the percentage of 'do not know' answers that have been recorded in the **Control costs**, **Persistence** and **Current distribution** sections. In the case of part questions, for example Control costs Questions 1 and 3 and Persistence Question 4 record the individual scores for each 'do not know' question in each part to determine the section uncertainty score. **Do not** combine the scores from each 'do not know' question to calculate a score for that question as was done to calculate the question score. See page **Error! Bookmark not defined.** for an example. The electronic form does this for you.

To calculate manually, adjust the section uncertainty score as follows:Control costs:Divide by 12 and multiply by 100. Round to nearest whole number.Persistence:Divide by 6 and multiply by 100. Round to nearest whole number.Current distribution:Divide by 6 and multiply by 100. Round to nearest whole number.(Round to the nearest whole number)

#### Feasibility uncertainty scores

	Section uncertainty score	Correction	Adjusted uncertainty score
Control costs		((Raw score)/12) x 100	
Persistence		((Raw score)/6) x 100	
Current Distribution		((Raw score)/6) x 100	

### **Overall uncertainty score**

Section	Adjusted uncertainty score (Percentage uncertainty)
Invasiveness	
Impacts	
Potential distribution	
Control costs	
Persistence	
Current Distribution	
	=(sum of adjusted uncertainty scores above)/6 (round to nearest whole number)

Calculation of overall uncertainty score

The following levels of overall uncertainty need to be considered before submitting assessments. Assessments submitted with levels of overall uncertainty exceeding 15% will generally be returned to the assessor/s for further research.

Overall uncertainty level	Suggested response needed
<15%	Submit assessment (ensure all information sources have been attached)
15-30%	Revisit existing literature and source new literature before submitting assessment (contact NSW DII staff for other possible information sources)
>30%	Do not submit assessment (contact NSW DII regional staff for help in locating information)

### **Positive impacts**

Are there any other positive impacts the species may have?		
Positive impact	Source	

List stakeholders consulted and outcomes of these discussions.

### Stakeholders consulted

### Outcomes

### **Further comments**

Are there any further comments you would like to offer to support this assessment?