



Santos  **HUNTER GAS**
PIPELINE

Biosecurity Management Protocol

Hunter Gas Pipeline – Narrabri to Newcastle

Date	Version	Author	Approver	Reason for issue
27/08/22	0	AC	PW	Issued for Consultation

Table of Contents

1.	Introduction.....	1
1.1.	Overview.....	1
1.2.	Biosecurity Protocol Application.....	2
1.3.	Biosecurity management in NSW.....	2
2.	Biosecurity management protocol.....	3
2.1.	Priority Weeds.....	3
2.2.	Priority pest animals.....	3
2.3.	Priority diseases.....	3
3.	Biosecurity matter risk assessment.....	4
4.	Biosecurity management controls.....	48
4.1.	Biosecurity hygiene protocols.....	48
4.2.	ALERTS.....	48
4.2.1.	FOOT AND MOUTH.....	48
4.2.2.	VARROA (BEE) MITE.....	48
Appendix A	Pest Hygiene Inspection Form.....	51
Appendix B	DPI Vehicle biosecurity kit.....	52
Table 1	Biosecurity management zones for the HGP – Narrabri to Newcastle.....	2
Table 2	Biosecurity risk priority rating criteria.....	3
Table 3	Priority weed risk and their duty.....	5
Table 4	Priority pest animals.....	43
Table 5	Priority disease.....	47
Table 6	Biosecurity precautions.....	48

Introduction

1.1. Overview

This biosecurity management protocol focuses on regional and national weeds, pest animals and diseases of concern' within the proposed Hunter Gas Pipeline (HGP) alignment. This protocol specifically focuses on the HGP section from **Narrabri to Newcastle** (KP440 to KP833) in New South Wales (NSW).

The HGP is a critical component for delivering gas from Northern Australia via the Wallumbilla Gas Hub near Roma in Queensland (QLD) and Narrabri to Newcastle in NSW. This pipeline will supply gas to the major domestic and industrial markets of NSW, namely the Hunter Region and Sydney Basin. This protocol will provide guidance for contractors who undertake works within the alignment, with the aim of reducing the potential for biosecurity items of concern to be spread by movement between properties during the environmental impact assessment works.

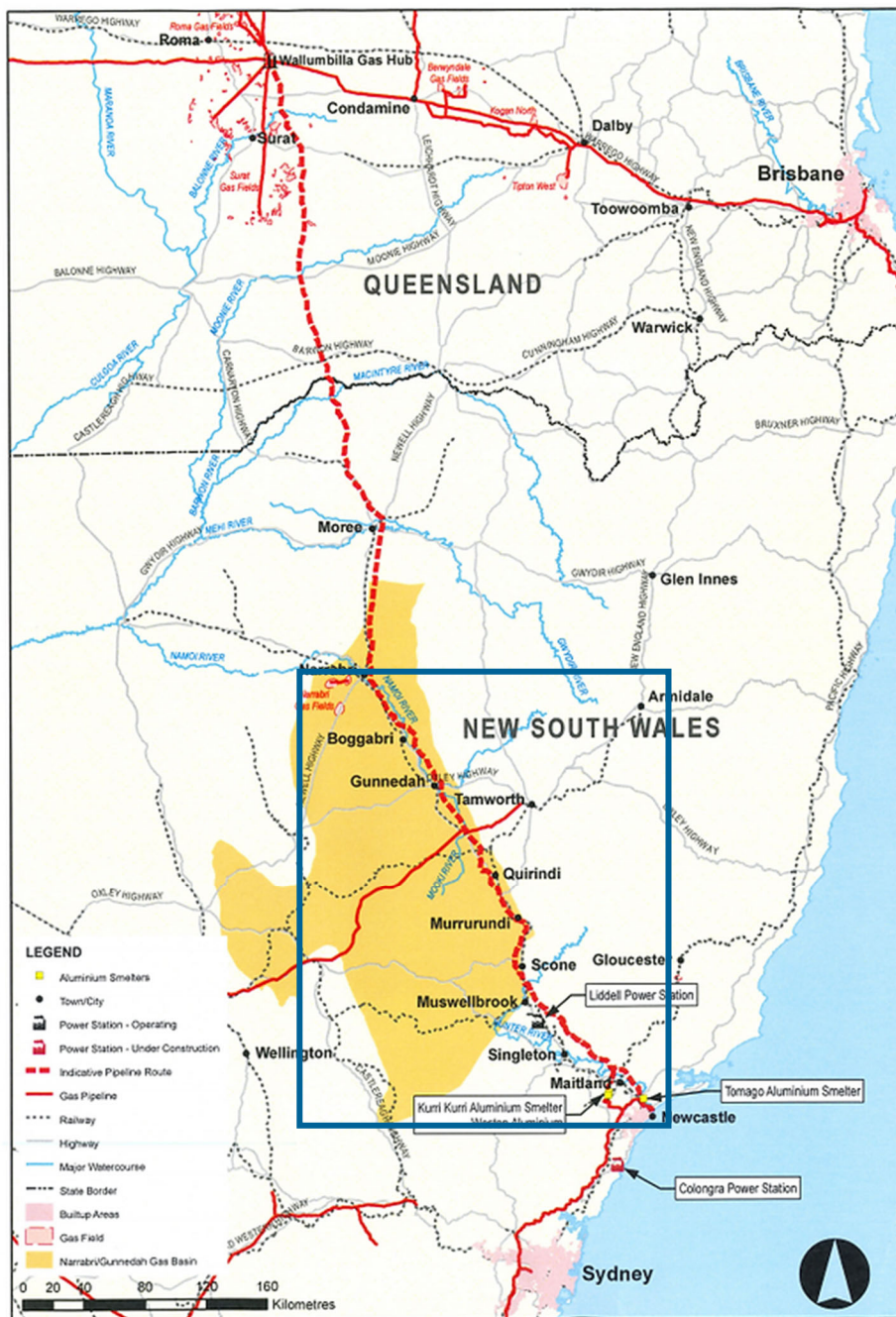


Figure 1: NGP alignment, Narrabri to Newcastle



1.2. Biosecurity Protocol Application

This protocol applies to the works required prior to HGP construction commencement. Key activities undertaken during this phase of the project will include access to properties to meet with landowners and undertake geotechnical investigations, environmental and other surveys.

This protocol does not cover any construction and operations activities, which will be covered by specific Construction Environmental Management Plan (CEMP) as required by the project approval (06_0286).

1.3. Biosecurity management in NSW

This protocol provides guidance to Santos and its contractors regarding their 'Biosecurity Duty' pursuant to the NSW *Biosecurity Act 2015* (the 'Act'). Under Clause 22 of the Act Biosecurity duty is defined as:

Part 3 General biosecurity duty

22 Biosecurity duty—dealings with biosecurity matter and carriers

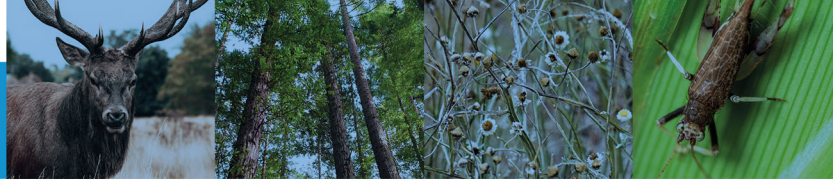
Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented,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

Santos and its contractors undertaking works within the project alignment have the potential to act as a 'Carrier'.

This protocol has been based on biosecurity matters listed under Schedule 2 of the Act for 'Prohibited matters' including pests and diseases, terrestrial and aquatic pest fauna, terrestrial and freshwater weeds, with guidance from Department of Primary Industries website (<http://www.dpi.nsw.gov.au/biosecurity>) and Regional Strategic Weed Management Plans for the local land services (LLS) regions within which the project alignment occurs (Table 1).

Table 1 Biosecurity management zones for the HGP – Narrabri to Newcastle

Zone	Zone boundary	Local Land Services Area	Local Government Authority
1	– KP440 to KP643	<ul style="list-style-type: none"> – North West – North-West-Regional-Weed-Mgmt-Plan-web-version.pdf (nsw.gov.au) 	<ul style="list-style-type: none"> – Narrabri Shire LGA – Gunnedah Shire LGA – Liverpool Plains Shire LGA
2	– KP644 to KP833	<ul style="list-style-type: none"> – Hunter – hunter strategic weed plan (nsw.gov.au) 	<ul style="list-style-type: none"> – Upper Hunter Shire LGA – Muswellbrook Shire LGA – Singleton Shire LGA – Maitland Shire LGA – Port Stephens LGA – Newcastle City Council LGA



Biosecurity management protocol

2.1. Priority Weeds

Priority weeds and their regional management priorities have been collated from the Regional Strategic Weed Management Plans (North West and Hunter) and NSW WeedWise profiles (<http://weeds.dpi.nsw.gov.au/WeedListPublics>; accessed 27/08/22).

Desktop risk ratings are based on the criteria shown in Table 3 and further detailed in Section 3.

2.2. Priority pest animals

Priority pest animals have been collated from the following DPI databases:

- Vertebrate Pest Animals (<http://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests>; accessed 27/08/2022)
- Aquatic biosecurity (<http://www.dpi.nsw.gov.au/biosecurity/aquatic>; accessed 27/08/2022)
- Insect Pests (<http://www.dpi.nsw.gov.au/biosecurity/insect-pests>; accessed 27/08/2022)
- Plant Biosecurity (<http://www.dpi.nsw.gov.au/biosecurity/plant>; accessed 27/08/2022)

2.3. Priority diseases

Priority diseases have been collated from the following DPI databases:

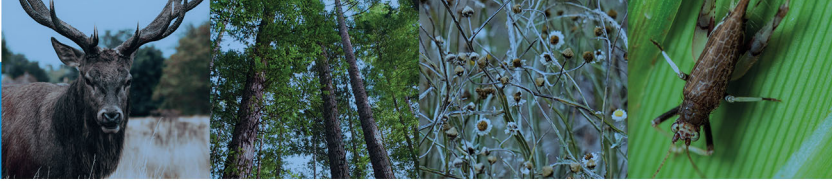
- Aquatic biosecurity (<http://www.dpi.nsw.gov.au/biosecurity/aquatic>; accessed 27/08/2022)
- Plant Biosecurity (<http://www.dpi.nsw.gov.au/biosecurity/plant>; accessed 27/08/2022)
- Animal Biosecurity (<http://www.dpi.nsw.gov.au/biosecurity/animal>; accessed 27/08/2022)

Desktop risk ratings are based on the criteria shown in Table 2 and further detailed in Section 3.

Table 2 Biosecurity risk priority rating criteria

Risk Rating	Criteria
High	<ul style="list-style-type: none"> – Biosecurity item easily transported between properties by Carriers – Biosecurity item will easily be established after transportation and be difficult to control – Biosecurity item poses a significant threat, either to agricultural activities, livestock or the natural environment.
Medium	<ul style="list-style-type: none"> – Biosecurity item moderately easily transported between properties by Carriers. – Biosecurity item may establish after transportation – Biosecurity item poses moderate threat to agricultural activities, livestock or the natural environment.
Low	<ul style="list-style-type: none"> – Biosecurity item not currently known to occur in the LLS or LGA – Biosecurity item not easily transported between properties by Carriers – Biosecurity item unlikely to establish after transportation – Biosecurity item poses minimal threat to agricultural activities, livestock, or the natural environment.

Risk ratings presented in Table 4 will be reviewed and updated as required as part of Protocol Stage 2.



Biosecurity matter risk assessment

The desktop biosecurity matter risk assessment has been compiled from publicly accessible data published by Department of Primary Industries website (<http://www.dpi.nsw.gov.au/biosecurity>) and Regional Strategic Weed Management Plans and the priority actions contained within each document (North West LLS and Hunter LLS).

Potential for terrestrial biosecurity matters to occur within the alignment has been rated using the same scale in the Regional Strategic Weed Management Plans as an indicator of a weeds potential presence within a weed management zone (Table 1).

The tabulated data for the biosecurity assessment is shown below in Table 3, Table 4, and Table 5.

For Consultation

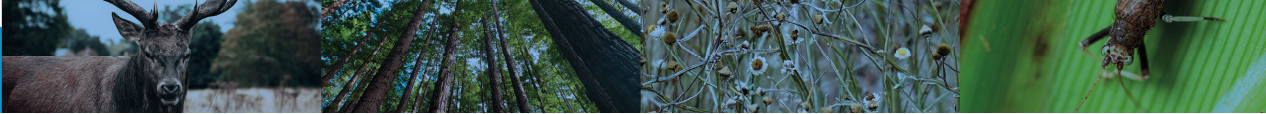
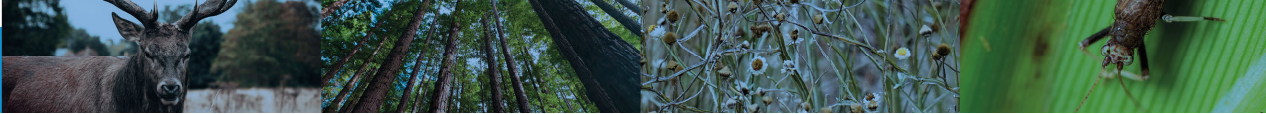
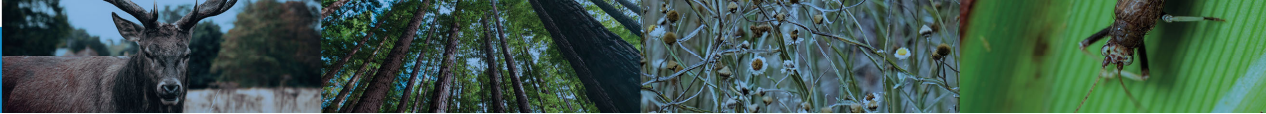



Table 3 Priority weed risk and their duty

Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
All plants	General Biosecurity Duty <i>All plants are regulated with a general biosecurity duty to prevent, eliminate, or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.</i>			
Aaron's beard prickly pear <i>Opuntia leucotricha</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
African boxthorn <i>Lycium ferocissimum</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y	Y	
African olive <i>Olea europaea</i> subsp. <i>cuspidata</i>	Regional Recommended Measure <i>Land managers mitigate the risk of the plant being introduced to their land. Land managers reduce impacts from the plant on priority assets. Land managers prevent spread from their land where feasible. The plant or parts of the plant are not traded, carried, grown or released into the environment</i>	Y	Y	
Alligator weed <i>Alternanthera philoxeroides</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>		Y	
Alligator weed <i>Alternanthera philoxeroides</i>	Biosecurity Zone <i>The Alligator Weed Biosecurity Zone is established for all land within the state except land in the following regions: Greater Sydney; Hunter (but only in the local government areas of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens). Within the Biosecurity Zone this weed</i>		Y	



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone</i>			
<u>Anchored water hyacinth</u> <i>Eichhornia azurea</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Arrowhead</u> <i>Sagittaria calycina</i> var. <i>calycina</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
<u>Asparagus fern</u> <i>Asparagus virgatus</i>	Regional Recommended Measure Exclusion zone: whole of region except Newcastle and Lake Macquarie. Core infestation area: Newcastle and Lake Macquarie. <i>Whole of region: Land managers should mitigate the risk of new weeds being introduced to their land. Plant should not be bought, sold, grown, carried or released into the environment. Within exclusion zone: The plant should be eradicated from the land and the land</i>			



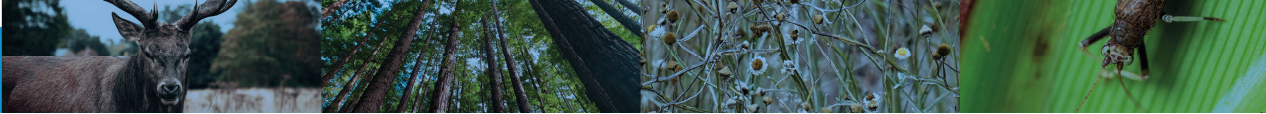
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>kept free of the plant. Notify the Local Control Authority if found. Land managers should mitigate spread from their land. Within Core infestation: Land managers to reduce impacts from the plant on priority assets.</i></p>			
<p><u>Athel pine</u> <i>Tamarix aphylla</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Bellyache bush</u> <i>Jatropha gossypifolia</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Bitou bush</u> <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>		Y	
<p><u>Bitou bush</u> <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i></p>	<p>Biosecurity Zone 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.</p>			




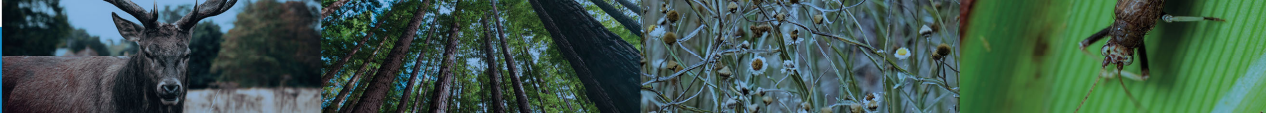
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone</i>			
<u>Black knapweed</u> <i>Centaurea x moncktonii</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>	Y		
<u>Black willow</u> <i>Salix nigra</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
<u>Blackberry</u> <i>Rubus fruticosus</i> species aggregate	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. All species in the Rubus fruticosus species aggregate have this requirement, except for the varieties Black Satin, Chehalem, Chester Thornless, Dirksen Thornless, Loch Ness, Murrindindi, Silvan, Smooth Stem, and Thornfree</i>	Y	Y	
<u>Blackberry</u> <i>Rubus fruticosus</i> species aggregate	Regional Recommended Measure <i>The plant should not be bought, sold, grown, carried or released into the environment. Land managers should mitigate the risk of the plant being introduced to their land. Land managers</i>			




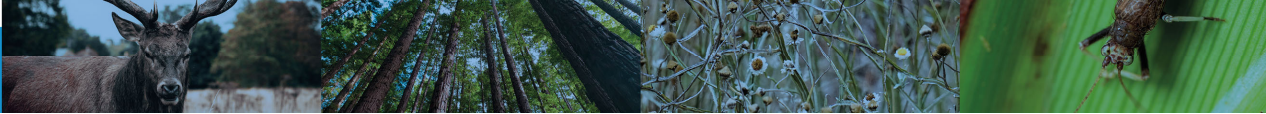
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>should mitigate spread from their land. Land managers to reduce impacts from the plant on priority assets.</i>			
<u>Blind cactus</u> <i>Opuntia rufo</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
<u>Boneseed</u> <i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>		Y	
<u>Boneseed</u> <i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	Control Order Boneseed Control Zone: Whole of NSW <i>Boneseed Control Zone (Whole of NSW): Owners and occupiers of land on which there is boneseed must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of boneseed must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.</i>	Y		
<u>Boxing glove cactus</u> <i>Cylindropuntia fulgida</i> var. <i>mamillata</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
<u>Bridal creeper</u> <i>Asparagus asparagoides</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i> *this requirement also applies to the Western Cape form of bridal creeper	Y	Y	




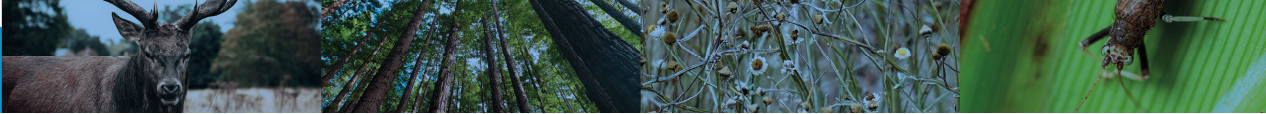
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Bridal veil creeper</u> <i>Asparagus declinatus</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i></p>			
<p><u>Broomrapes</u> <i>Orobanche</i> species</p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species of Orobanche are Prohibited Matter in NSW, except Clover broomrape, <i>Orobanche minor</i> and Australian broomrape, <i>Orobanche cernua</i> var. <i>australiana</i>.</p>			
<p><u>Bunny ears cactus</u> <i>Opuntia microdasys</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>	Y	Y	




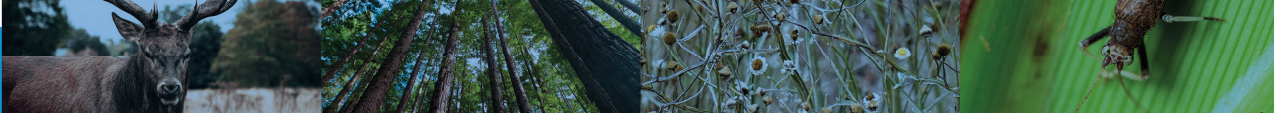
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Cabomba</u> <i>Cabomba caroliniana</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Cabomba</u> <i>Cabomba caroliniana</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>			
<p><u>Cane cactus</u> <i>Austrocyllindropuntia cylindrica</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i> All species in the Austrocyllindropuntia genus have this requirement</p>			




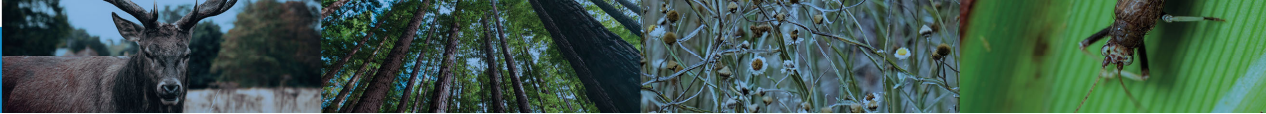
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
Cape broom <i>Genista monspessulana</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Cat's claw creeper <i>Dolichandra unguis-cati</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
Cat's claw creeper <i>Dolichandra unguis-cati</i>	Regional Recommended Measure <i>The plant should not be bought, sold, grown, carried or released into the environment. Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread from their land. Land managers to reduce impacts from the plant on priority assets.</i>	Y	Y	
Chicken dance cactus <i>Opuntia schickendantzii</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Chilean needle grass <i>Nassella neesiana</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		



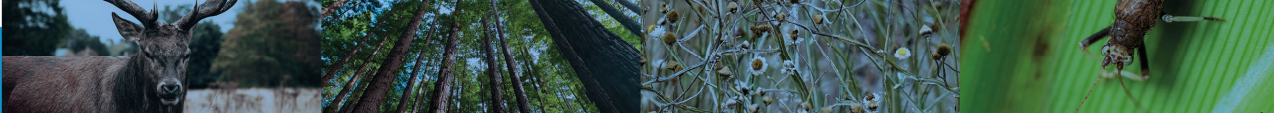
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Chilean needle grass</u> <i>Nassella neesiana</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>	<p>Y</p>		
<p><u>Chinese knotweed</u> <i>Persicaria chinensis</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>		<p>Y</p>	



<p><u>Chinese violet</u> <i>Asystasia gangetica</i> subsp. <i>micrantha</i></p>	<p>Control Order <i>Owners and occupiers of land on which there is Chinese violet must notify the local control authority for the area if the Chinese violet is part of a new infestation on the land, destroy all Chinese violet on the land ensuring that subsequent generations of Chinese violet are destroyed; and keep the land free of Chinese violet. A person who deals with a carrier of Chinese violet must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.</i></p>			
<p><u>Climbing asparagus</u> <i>Asparagus africanus</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<u>Climbing asparagus</u> <i>Asparagus africanus</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
<u>Climbing asparagus fern</u> <i>Asparagus plumosus</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
<u>Common pear</u> <i>Opuntia stricta</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y	Y	



Coolatai grass
Hyparrhenia hirta

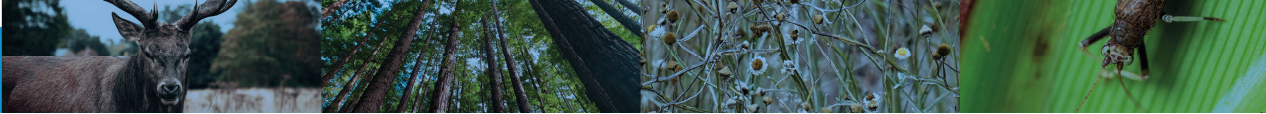
Regional Recommended Measure
The plant should not be bought, sold, grown, carried or released into the environment. Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread from their land. Land managers to reduce impacts from the plant on priority assets.


Y

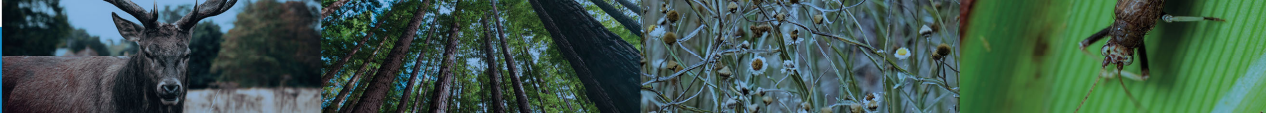




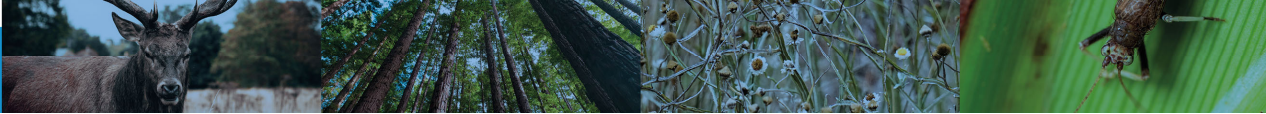
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>East Indian hygrophila</u> <i>Hygrophila polysperma</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>			
<p><u>Espartillo - broad kernel</u> <i>Amelichloa caudata</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>	Y		
<p><u>Espartillo - narrow kernel</u> <i>Amelichloa brachychaeta</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>	Y		
<p><u>Eurasian water milfoil</u> <i>Myriophyllum spicatum</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i></p>			



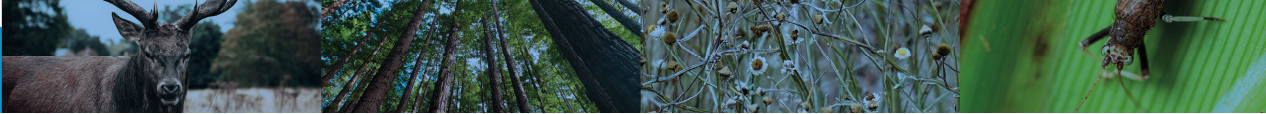
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<u>Eve's needle cactus</u> <i>Austrocylindropuntia subulata</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i> All species in the Austrocylindropuntia genus have this requirement			
<u>Fireweed</u> <i>Senecio madagascariensis</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>		Y	
<u>Flax-leaf broom</u> <i>Genista linifolia</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
<u>Foxtail fern</u> <i>Asparagus densiflorus</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y		
<u>Frogbit</u> <i>Limnobium laevigatum</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>		Y	




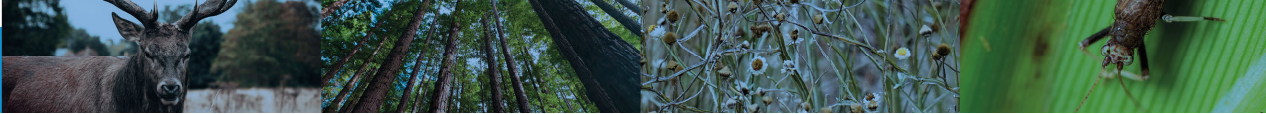
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	All species of Limnobium are Prohibited Matter			
<u>Gamba grass</u> <i>Andropogon gayanus</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Giant devil's fig</u> <i>Solanum chrysotrichum</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>	Y		
<u>Giant Parramatta grass</u> <i>Sporobolus fertilis</i>	Regional Recommended Measure <i>The plant should not be bought, sold, grown, carried or released into the environment. Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread from their land. Land managers to reduce impacts from plant on priority assets.</i>			
<u>Giant rat's tail grass</u> <i>Sporobolus pyramidalis</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought,</i>			



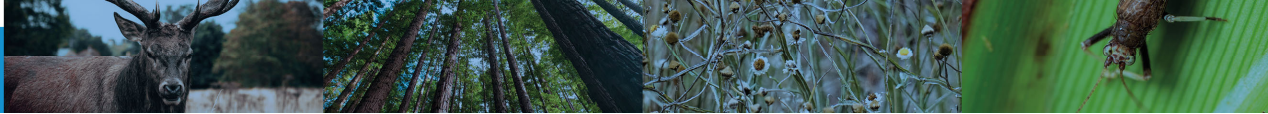
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
<u>Glory lily</u> <i>Gloriosa superba</i>	Regional Recommended Measure Exclusion zone: whole region except core infestation area of the MidCoast, Port Stephens, Newcastle and Lake Macquarie local government areas <i>Whole region: The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found. Land managers should mitigate the risk of the plant being introduced to their land. Exclusion zone: The plant should be eradicated from the land and the land kept free of the plant. Core infestation area: Land managers should mitigate spread from their land.</i>		Y	
<u>Gorse</u> <i>Ulex europaeus</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
<u>Gorse</u> <i>Ulex europaeus</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
<u>Green cestrum</u> <i>Cestrum parqui</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. Land managers should mitigate</i>		Y	



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>spread from their land. The plant should not be bought, sold, grown, carried or released into the environment. Land managers reduce impacts from the plant on priority assets.</i></p>			
<p><u>Grey sallow</u> <i>Salix cinerea</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>	Y		
<p><u>Ground asparagus</u> <i>Asparagus aethiopicus</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>		Y	
<p><u>Harrisia cactus</u> <i>Harrisia species</i></p>	<p>Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area, comprising the Gwydir Shire council and Moree Plains Shire council <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i> This Regional Recommended Measure applies to <i>Harrisia martinii</i> and <i>Harrisia tortuosa</i></p>	Y		
<p><u>Hawkweeds</u> <i>Pilosella species</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who</i></p>			



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species in the genera <i>Pilosella</i> and <i>Hieracium</i> are Prohibited Matter except for <i>Hieracium murorum</i>.</p>			
<p><u>Honey locust</u> <i>Gleditsia triacanthos</i></p>	<p>Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area comprising the Gunnedah Shire council; Narrabri Shire council and Tamworth Regional council <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i></p>	<p>Y</p>		
<p><u>Horsetails</u> <i>Equisetum</i> species</p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>			



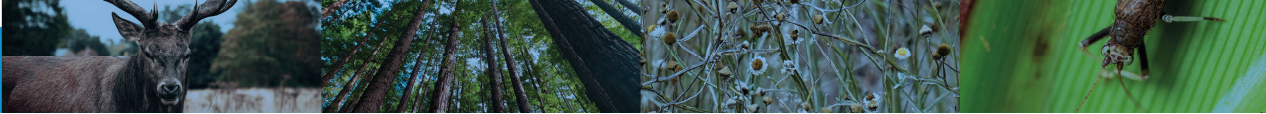
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
Hudson pear <i>Cylindropuntia pallida</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Hudson pear <i>Cylindropuntia pallida</i>	Regional Recommended Measure <i>Whole of Region, excluding Core infestations within Walgett shire</i> <i>Whole of Region: The plant should not be bought, sold, grown, carried or released into the environment. Within Exclusion Zone: Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. Within Core infestation: Land managers reduce impacts from the plant on priority assets. Core infestations should be contained and reduced in extent and outlier infestations should be continuously suppressed and destroyed.</i>			
Hydrocotyl <i>Hydrocotyle ranunculoides</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
Hygrophila <i>Hygrophila costata</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the</i>		Y	



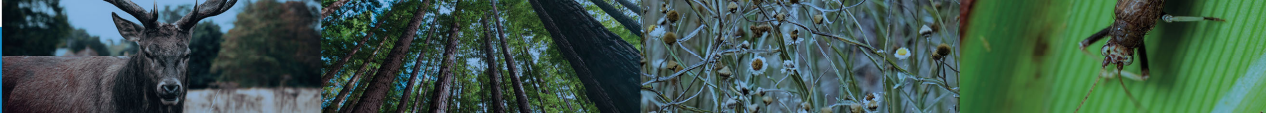
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>environment. Notify local control authority if found.</i>			
<u>Hymenachne</u> <i>Hymenachne amplexicaulis</i> and hybrids	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
<u>Hymenachne</u> <i>Hymenachne amplexicaulis</i> and hybrids	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
<u>Karoo acacia</u> <i>Vachellia karroo</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Kidney-leaf mud plantain</u> <i>Heteranthera reniformis</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			



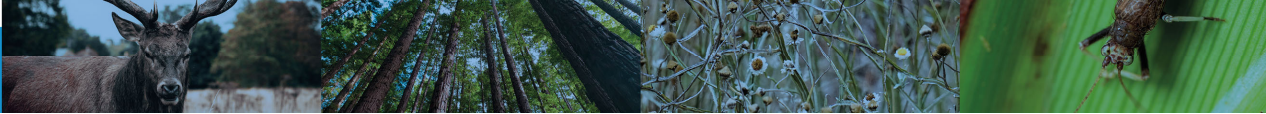
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Kochia</u> <i>Bassia scoparia</i></p>	<p>Prohibited Matter A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries Excluding the subspecies <i>trichophylla</i></p>			
<p><u>Koster's curse</u> <i>Clidemia hirta</i></p>	<p>Prohibited Matter A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</p>			
<p><u>Lagarosiphon</u> <i>Lagarosiphon major</i></p>	<p>Prohibited Matter A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</p>		Y	
<p><u>Lantana</u> <i>Lantana camara</i></p>	<p>Prohibition on certain dealings Must not be imported into the state, sold, bartered, exchanged or offered for sale.</p>	Y	Y	



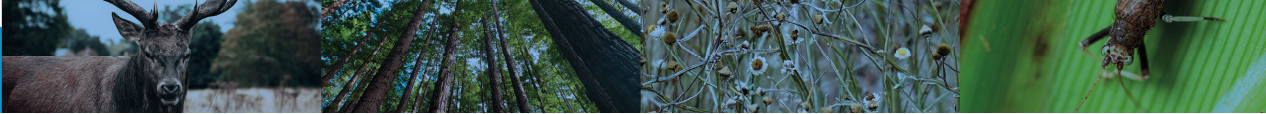
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<u>Leafy elodea</u> <i>Egeria densa</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>		Y	
<u>Long-leaf willow primrose</u> <i>Ludwigia longifolia</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>		Y	
<u>Ludwigia</u> / Peruvian primrose <i>Ludwigia peruviana</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>		Y	
<u>Madeira vine</u> <i>Anredera cordifolia</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
<u>Madeira vine</u> <i>Anredera cordifolia</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their</i>			




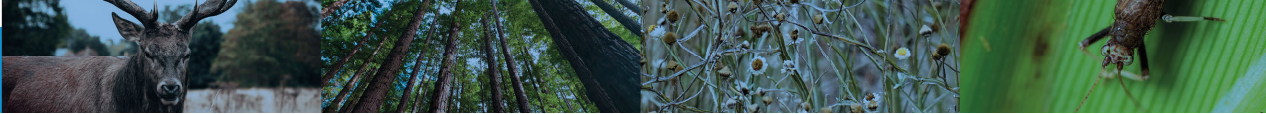
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>land. Land managers reduce impacts from the plant on priority assets.</i>			
<u>Mesquite</u> <i>Prosopis</i> species	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i> All species in the genus <i>Prosopis</i> have this requirement			
<u>Mesquite</u> <i>Prosopis</i> species	Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area comprising the Walgett Shire council <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i>			
<u>Mexican feather grass</u> <i>Nassella tenuissima</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Miconia</u> <i>Miconia</i> species	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who</i>			




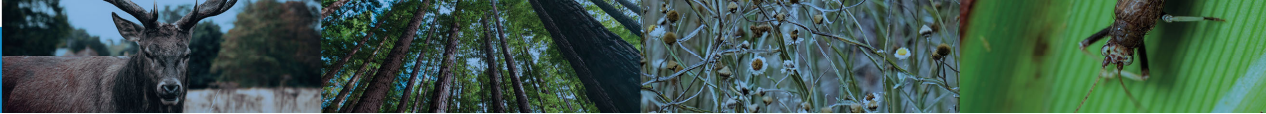
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species of Miconia are Prohibited Matter in NSW</p>			
<p><u>Mikania vine</u> <i>Mikania micrantha</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> *all species in the genus Mikania are Prohibited Matter in NSW</p>			
<p><u>Mimosa</u> <i>Mimosa pigra</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i></p>			



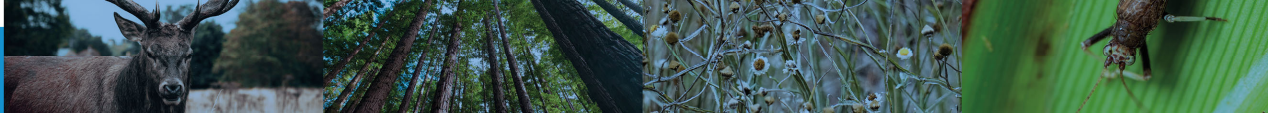
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Mother-of-millions</u> <i>Bryophyllum</i> species</p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. Land managers should mitigate spread from their land. The plant should not be bought, sold, grown, carried or released into the environment.</i> This Regional Recommended Measure applies to <i>Bryophyllum delagoense</i></p>			
<p><u>Parkinsonia</u> <i>Parkinsonia aculeata</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Parkinsonia</u> <i>Parkinsonia aculeata</i></p>	<p>Control Order <i>Parkinsonia Control Zone: Whole of NSW Parkinsonia Control Zone (Whole of NSW): Owners and occupiers of land on which there is parkinsonia must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of parkinsonia must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.</i></p>			



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Parthenium weed</u> <i>Parthenium hysterophorus</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i></p>			
<p><u>Parthenium weed</u> <i>Parthenium hysterophorus</i></p>	<p>Prohibition on certain dealings <i>The following equipment must not be imported into NSW from Queensland: grain harvesters (including the comb or front), comb trailers (including the comb or front), bins used for holding grain during harvest operations, augers or similar for moving grain, vehicles used to transport grain harvesters, support vehicles driven in paddocks during harvest operations, mineral exploration drilling rigs and vehicles used to transport those rigs, unless set out as an exception in Division 5, Part 2 of the Biosecurity Order (Permitted Activities) 2017</i></p>			
<p><u>Pond apple</u> <i>Annona glabra</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who</i></p>			



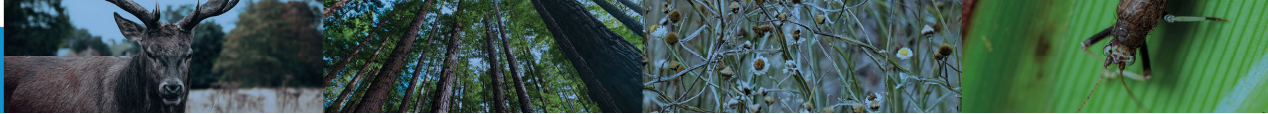
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Prickly acacia</u> <i>Vachellia nilotica</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>	Y	Y	
<u>Prickly pears - Austrocyliindropuntias</u> <i>Austrocyliindropuntia</i> species	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. All species in the Austrocyliindropuntia genus have this requirement</i>	Y	Y	
<u>Prickly pears - Cyliindropuntias</u> <i>Cyliindropuntia</i> species	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. All species in the Cyliindropuntia genus have this requirement</i>	Y	Y	
<u>Prickly pears - Opuntias</u> <i>Opuntia</i> species	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. For all Opuntia species except for Opuntia ficus-indica (Indian fig).</i>	Y	Y	
<u>Rhus tree</u> <i>Toxicodendron succedaneum</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the</i>			




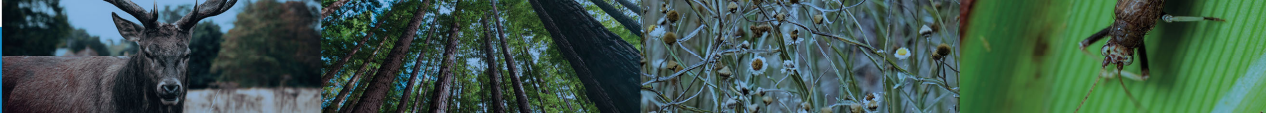
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
Riverina pear <i>Opuntia elata</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. For all Opuntia species except for Opuntia ficus-indica (Indian fig).</i>	Y		
Rope pear <i>Cylindropuntia imbricata</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale. All species in the Cylindropuntia genus have this requirement</i>			
Rope pear <i>Cylindropuntia imbricata</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. Land managers should mitigate spread from their land.</i>			
Rubber vine <i>Cryptostegia grandiflora</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
Sagittaria <i>Sagittaria platyphylla</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			



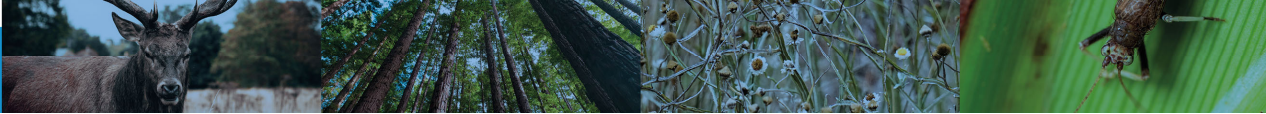
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
Sagittaria <i>Sagittaria platyphylla</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. Plant should not be bought, sold, grown, carried or released into the environment.</i>			
Salvinia <i>Salvinia molesta</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Salvinia <i>Salvinia molesta</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. Plant should not be bought, sold, grown, carried or released into the environment.</i>			
Scotch broom <i>Cytisus scoparius</i> subsp. <i>scoparius</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Scotch broom <i>Cytisus scoparius</i> subsp. <i>scoparius</i>	Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area comprising all Local Government Areas east of the Newell Highway <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; land managers should mitigate</i>			



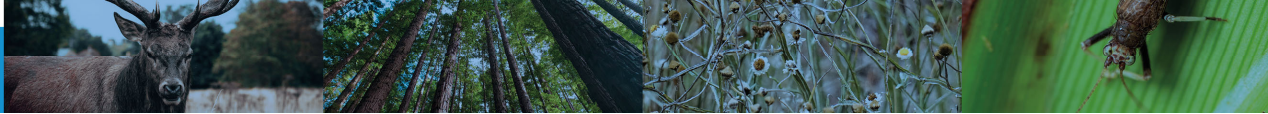
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>spread from their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i></p>			
<p><u>Senegal tea plant</u> <i>Gymnocoronis spilanthoides</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i></p>			
<p><u>Serrated tussock</u> <i>Nassella trichotoma</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Serrated tussock</u> <i>Nassella trichotoma</i></p>	<p>Regional Recommended Measure <i>An exclusion zone is established for all lands in the region, except the core infestation area comprising all Local Government Areas east of the Newell Highway</i> <i>Whole of region: The plant should not be</i></p>			




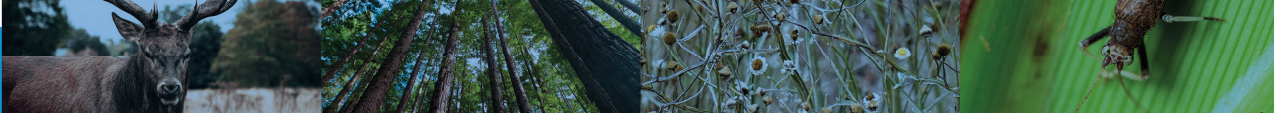
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; land managers should mitigate spread from their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i>			
<u>Siam weed</u> <i>Chromolaena odorata</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Silverleaf nightshade</u> <i>Solanum elaeagnifolium</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>	Y	Y	
<u>Silverleaf nightshade</u> <i>Solanum elaeagnifolium</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. Land managers should mitigate spread from their land. Land managers reduce impacts from the plant on priority assets.</i>			
<u>Smooth tree pear</u> <i>Opuntia monacantha</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
Snakefeather <i>Asparagus scandens</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
Spongeplant <i>Limnobium spongia</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species of <i>Limnobium</i> are Prohibited Matter			
Spotted knapweed <i>Centaurea stoebe</i> subsp. <i>micranthos</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			

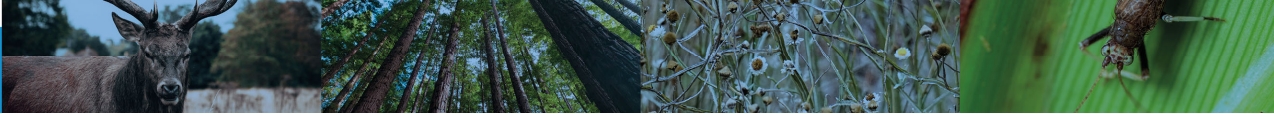



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>St. John's wort</u> <i>Hypericum perforatum</i></p>	<p>Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area comprising the Gunnedah Shire council, Gwydir Shire council, Liverpool Plains Shire council and Tamworth Regional council <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; land managers should mitigate spread from their land. Core infestation: Land managers reduce impacts from the plant on priority assets</i></p>			
<p><u>Sweet briar</u> <i>Rosa rubiginosa</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. Land managers should mitigate spread from their land. The plant should not be bought, sold, grown, carried or released into the environment.</i></p>			
<p><u>Tiger pear</u> <i>Opuntia aurantiaca</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>	Y	Y	
<p><u>Tiger pear</u> <i>Opuntia aurantiaca</i></p>	<p>Regional Recommended Measure <i>Plant should not be bought, sold, propagated, grown, knowingly distributed, carried or released into the environment. Land managers should mitigate the risk of new weeds being introduced to their land. Land managers reduce the impacts of the plant on priority assets. Land</i></p>	Y	Y	



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<p><i>managers should prevent seed and propagules spreading from their land.</i></p>			

For Consultation



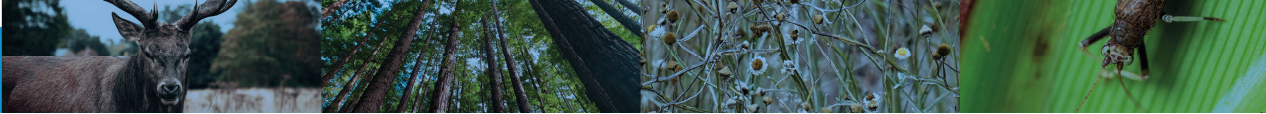
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Tropical soda apple</u> <i>Solanum viarum</i></p>	<p>Control Order Tropical Soda Apple Control Zone: Whole of NSW <i>Tropical Soda Apple Control Zone (Whole of NSW): Owners and occupiers of land on which there is tropical soda apple must notify the local control authority of new infestations; destroy the plants including the fruit; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of tropical soda apple must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.</i></p>	Y	Y	



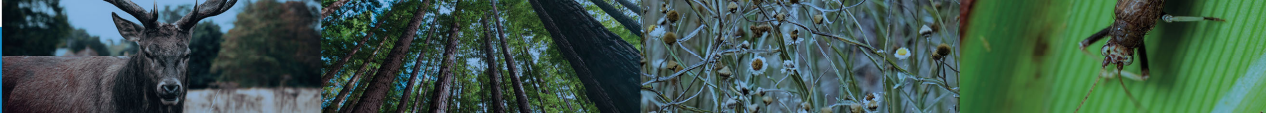
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
<p><u>Velvety tree pear</u> <i>Opuntia tomentosa</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Water caltrop</u> <i>Trapa</i> species</p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species in the <i>Trapa</i> genus are Prohibited Matter in NSW</p>			
<p><u>Water hyacinth</u> <i>Eichhornia crassipes</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i></p>			
<p><u>Water hyacinth</u> <i>Eichhornia crassipes</i></p>	<p>Biosecurity Zone The Water Hyacinth Biosecurity Zone applies to all land within the State, except for the following regions: Greater Sydney or North Coast, North West (but only the local government area of Moree Plains), Hunter (but only in the local government areas of City of Cessnock, City of Lake Macquarie, MidCoast, City of Maitland, City of Newcastle or Port Stephens), South East (but only in the local government areas of Eurobodalla, Kiama, City of Shellharbour, City of Shoalhaven or City of Wollongong). <i>Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority</i></p>			



Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	<i>must be notified of any new infestations of this weed within the Biosecurity Zone</i>			
<u>Water hyacinth</u> <i>Eichhornia crassipes</i>	Regional Recommended Measure An exclusion zone is established for all lands in the region, except the core infestation area comprising the Moree Plains Shire council <i>Whole of region: The plant should not be bought, sold, grown, carried or released into the environment. Exclusion zone: Land managers should mitigate the risk of new weeds being introduced to their land; land managers should mitigate spread from their land; the plant should be eradicated from the land and the land kept free of the plant. Core infestation: Land managers reduce impacts from the plant on priority assets</i>			
<u>Water lettuce</u> <i>Pistia stratiotes</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment.</i>			
<u>Water lilies</u> <i>Nymphaea species</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			




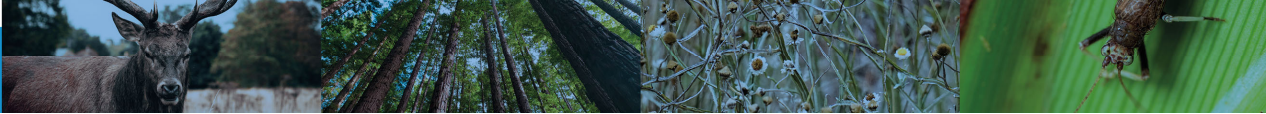
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
	This Regional Recommended Measure applies to <i>Nymphaea mexicana</i> (Mexican water lily)			
<u>Water soldier</u> <i>Stratiotes aloides</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			
<u>Wheel cactus</u> <i>Opuntia robusta</i>	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i>			
<u>Willows</u> <i>Salix</i> species	Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged or offered for sale.</i> All species in the <i>Salix</i> genus have this requirement, except <i>Salix babylonica</i> (weeping willows), <i>Salix x calodendron</i> (pussy willow) and <i>Salix x reichardtii</i> (sterile pussy willow)			
<u>Witchweeds</u> <i>Striga</i> species	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species in the <i>Striga</i> genus are Prohibited Matter in NSW, except the native <i>Striga parviflora</i>			






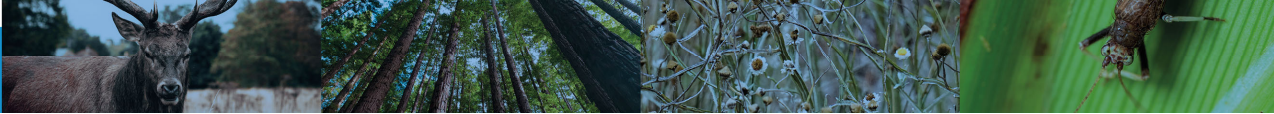
Weed	Duty	Known present Zone 1 (North West LLS)	Known present Zone 2 (Hunter LLS)	Photo – high risk only (DPI NSW WeedWise 2022)
Yellow bells <i>Tecoma stans</i>	Regional Recommended Measure <i>Land managers should mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.</i>			
Yellow burrhead <i>Limnocharis flava</i>	Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>			

Table 4 Priority pest animals

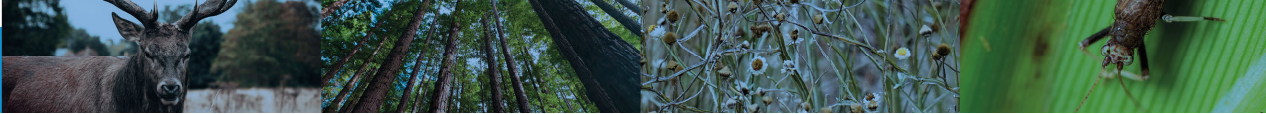
Genus	Common name	Dispersal mechanism	Specific hygiene protocols	Photo (high risk only (DPI NSW WeedWise 2022))
<i>Chortoicetes terminifera</i> <i>Locusta migratoria</i> <i>Austracris guttulosa</i>	<i>Australian plague locust</i> <i>Migratory locust</i> <i>Spur-throated locust</i>	Not applicable	Notify LCA of observed activity	

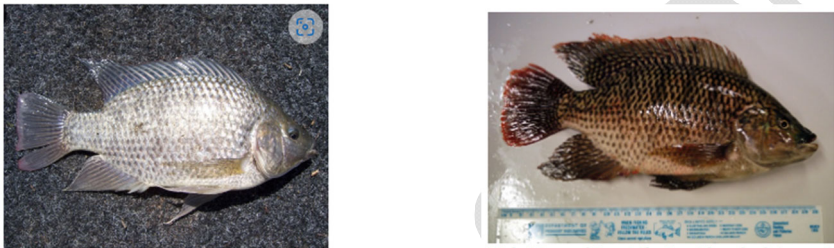



Genus	Common name	Dispersal mechanism	Specific hygiene protocols	Photo (high risk only (DPI NSW WeedWise 2022))
<i>Ceratitis capitata</i>	Mediterranean fruit fly	Host fruit or soil.	Wash down for vehicles or gear that has contact with soil if sourced from Western Australia.	
<i>Solenopsis invicta</i>	Red Imported Fire Ants	Crawling insect on person, gear, and machinery	Highest risk is spread into project space. Implement stringent hygiene practices for plant, gear and persons that have worked within known Fire locations.	
<i>Bactrocera tryoni</i>	Queensland fruit fly	Host fruit	No fruit to be imported from Queensland with personnel.	



Genus	Common name	Dispersal mechanism	Specific hygiene protocols	Photo (high risk only (DPI NSW WeedWise 2022))		
<i>Rusa unicolor</i>	Sambar Deer					
<i>Rusa timorensis</i>	Rusa Deer					



Genus	Common name	Dispersal mechanism	Specific hygiene protocols	Photo (high risk only (DPI NSW WeedWise 2022))
<i>Oreochromis mossambicus</i>	Mozambique Tilapia			 <p>Mozambique Tilapia - <i>Oreochromis mossambicus</i>. Photo: Qld DAF Male Mozambique Tilapia with red edging on its fins. Photo: Qld DAF</p>
<i>Rhinella marina</i>	Cane Toad			 <p> Adults are 10-15cm long with dry, warty skin Distinctive large poison (parotoid) gland behind their head Can be grey, yellowish, olive-brown or reddish brown Partially webbed back feet and unwebbed hands No wide pads on ends of fingers The underside is usually a dirty cream colour (sometimes marbled) Bony ridges over eyes that meet above the nose </p>

For Cor

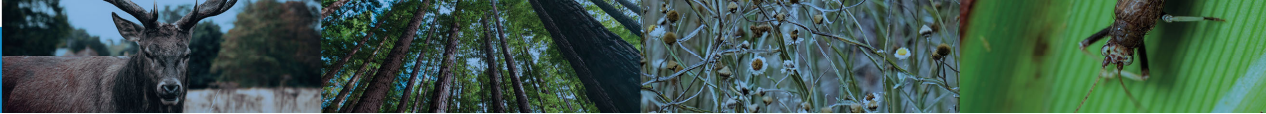
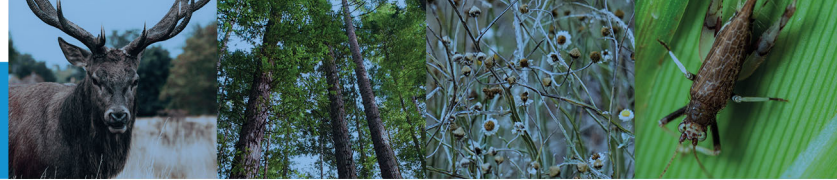


Table 5 Priority disease

Disease name	Dispersal mechanism	Specific hygiene protocols
Anthrax	Soil/ spores	
Hendra virus (other than in pteropid bats)	Close contact with bats or horses	Vaccination for ecologists in bats surveys are undertaken
Lyssavirus (including Australian bat lyssavirus)	Close contact with bats	Vaccination for ecologists in bats surveys are undertaken
Menangle virus	Close contact with pigs or bats	Vaccination for ecologists in bats surveys are undertaken
Tularaemia	Close contact with dead or dying wildlife	Vaccination for ecologists in bats surveys are undertaken



Biosecurity management controls

4.1. Biosecurity hygiene protocols

All contractors are to follow the general biosecurity precautions below (Table 6) for 'Prior to access' stage. All contractors are to carry a biosecurity kit in their vehicles, as described in the DPI factsheet attached as Appendix B.

Property specific biosecurity protocols will be produced for priority matters if detected during Stage 2 of the protocol. These biosecurity protocols will generally conform to measures provided in Table 6 for 'During access' and 'Post access' timing of hygiene precautions.

4.2. ALERTS

4.2.1. FOOT AND MOUTH

Foot-and-mouth disease (FMD) is a serious and highly contagious animal disease that affects all cloven-hoofed animals including cattle, sheep, goats, camelids, deer and pigs. Cloven-hoofed animals are those with divided hooves. It does not affect horse ([Foot-and-mouth disease - DAFF \(agriculture.gov.au\)](http://www.daff.gov.au) accessed 27/08/22).

ALL STAFF AND CONTRACTORS MUST NOT HAVE RETURNED FROM INDONESIA SEVEN (7) DAYS PRIOR TO ACCESSING SITE FOR THE HGP.

4.2.2. VARROA (BEE) MITE

[Varroa Mite \(nsw.gov.au\)](http://www.nsw.gov.au)

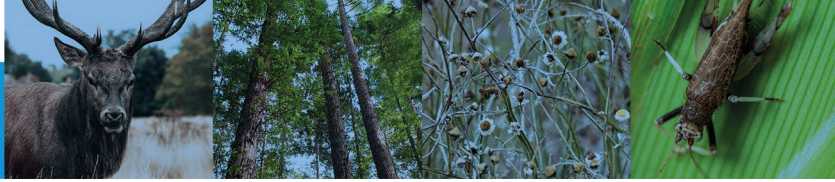
NSW DPI has detected varroa mite, which was confirmed as Varroa destructor, in biosecurity surveillance hives at the Port of Newcastle.

NSW DPI is working to protect the NSW honey industry by ensuring the eradication of the parasite.

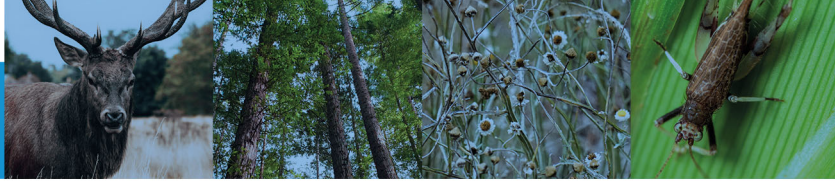
If you see anything suspicious use the online form at www.dpi.nsw.gov.au/hives, send an email to hive.location@emergency.dpi.nsw.gov.au or call the Exotic Plant Pest Hotline 1800 084 881.

Table 6 Biosecurity precautions

Timing	Daily hygiene precautions	Risk reduction
Prior to access	<ul style="list-style-type: none"> Santos and its contractors must confirm and plan the implementation of <u>property specific biosecurity requirements</u> prior to accessing site Ensure that all vehicles entering the land on Santos' behalf hold a current Pest Hygiene Inspection Form (refer Appendix A). Where vehicles and machinery have entered land that is known, or ought reasonably to have been known to be an area of biosecurity risk, a new Pest Hygiene Inspection Form will be completed prior to accessing the land Completed hygiene inspection forms are to be kept within the relevant vehicle during the works or available online Contractors to maintain PPE to minimise spread of biosecurity items i.e., no rips in long pants, wear gaiters, heavy soled boots All contractors to check clothes and gaiters, remove soil from boot soles daily. If clothes/equipment are found to be substantially dirty, they are to be laundered 	Prevent import of new biosecurity items to the project alignment

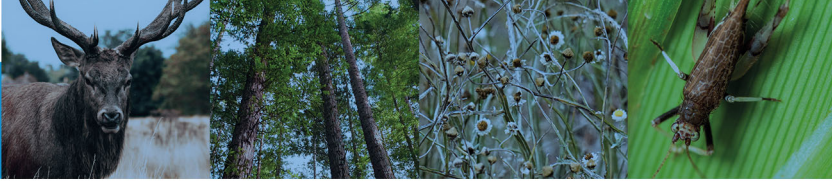


Timing	Daily hygiene precautions	Risk reduction
	<ul style="list-style-type: none"> - Tools to be cleaned free of soil and plant material prior to works starting - Toolbox talks and inductions are to include information on potential presence of weed and methods to reduce spread - Plan the work schedule to move from less infested areas to most infested areas (e.g., native bushland to exotic grasses) if known 	
During access	<ul style="list-style-type: none"> - All vehicles and machinery entering the land on Santos' behalf must hold a current Pest Hygiene Inspection Form and must present it upon request - Identification of biosecurity matters during toolbox talks - Avoidance or limiting vehicle / foot traffic through areas identified as having biosecurity matters present, if feasible - Limit access between and across sites to formed roads (public road network and internal property roads of similar standard to formed roads) and defined tracks wherever practicable - Limit vehicle entry into properties - Minimise entry and exit points from properties - Regular visual checks of PPE and vehicle tyres for plant parts and seed - If regionally reportable weeds are identified, report to LLS: <ul style="list-style-type: none"> o North West: <ul style="list-style-type: none"> ▪ 1300 795 299 ▪ admin.northwest@lls.nsw.gov.au o Hunter: <ul style="list-style-type: none"> ▪ 1300 795 299 ▪ admin.hunter@lls.nsw.gov.au - Where a potential biosecurity concern is identified: <ul style="list-style-type: none"> o Report an Report a biosecurity concern form o Call: 1800 680 244 o Email: invasive.species@dpi.nsw.gov.au 	<p>Prevent spread of biosecurity items within project alignment and between properties</p> <p>Reporting of regionally reportable weeds</p> <p>Reporting of biosecurity concerns</p>
Between properties / post works	<ul style="list-style-type: none"> - PPE and clothing to be brushed down, plant fragments and seeds removed, soils scrubbed from boots and gumboots, inside of vehicles cleaned. Bag detritus and seal. Deposit to local waste cell or waste cell collection point - Tools to be cleaned free of soil and plant material upon completion of works at each property - If vehicles have left formed roads, or have become soiled due to wet conditions, since the last successful vehicle hygiene inspection, a vehicle hygiene inspection must be conducted and passed prior to accessing any additional properties - Vehicle wash down and successful completion of a vehicle hygiene inspection must be undertaken prior to property access if directed by the Santos land access officer - If significant biosecurity matters are identified during investigations at a site a vehicle hygiene inspection must be 	<p>Prevent spread of biosecurity items within or from the project alignment and properties</p> <p>Reporting of regionally reportable weeds</p> <p>Reporting of biosecurity concerns</p>



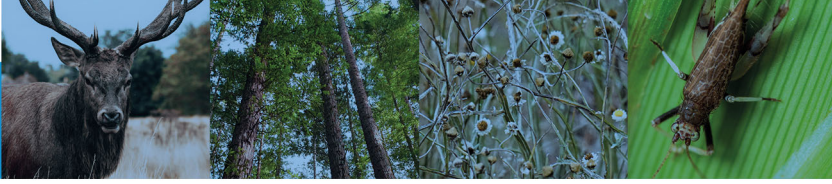
Timing	Daily hygiene precautions	Risk reduction
	<p>undertaken and passed prior to accessing any additional sites/properties</p> <ul style="list-style-type: none"> - Implement controls according to NSW government guidance - If regionally reportable weeds are identified, report to LLS: <ul style="list-style-type: none"> o North West: <ul style="list-style-type: none"> ▪ 1300 795 299 ▪ admin.northwest@lls.nsw.gov.au o Hunter: <ul style="list-style-type: none"> ▪ 1300 795 299 ▪ admin.hunter@lls.nsw.gov.au - Where a potential biosecurity concern is identified: <ul style="list-style-type: none"> o Report an Report a biosecurity concern form o Call: 1800 680 244 - Email: invasive.species@dpi.nsw.gov.au 	

For Consultation



Appendix A Pest Hygiene Inspection Form

For Consultation



Appendix B DPI Vehicle biosecurity kit

For Consultation