

GREATER SYDNEY
REGIONAL STRATEGIC
WEED MANAGEMENT PLAN
2017 - 2022

Photo: Frogbit / Spongeplant - *Limnoum spp* in de Freitis wetland, Fairfield

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing in June 2017. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser.







Prickly pear Opuntia spp



Four o'clock plant Mirabilis jalapa



Lantana Lantana camara

Priority weeds for the Greater Sydney Local Land Services region

This booklet covers State level determined priorities (1.1) and regionally determined priorities (1.2).

The *Biosecurity Act 2015* and regulations provide specific legal requirements for state level priority weeds (1.1) and high risk activities. For each state level priority weed, the state objective and how this objective is achieved through specific requirements under the *Biosecurity Act 2015* and regulations is covered. These specific regulatory requirements include Prohibited Matter, Biosecurity Zones, Mandatory Measures, Control Orders (see the Greater Sydney Regional Strategic Weed Management Plan 2017 - 2022).

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

Hierarchy of 1.1 and 1.2

To be considered a priority weed, the species must appear in either 1.1 or 1.2. Species are generally listed in a hierarchical order based on management objective, with Prevention the highest priority followed by Eradication, Containment and Asset Protection. Specific legal requirements apply to State determined priorities (1.1), while Regional Priorities (1.2) include "outcomes to demonstrate compliance with the General Biosecurity Duty" and "Strategic responses in the region" to achieve the relevant management objective (ie Prevention, Eradication, Containment or Asset Protection).

Generally a priority weed species will appear in either 1.1 or 1.2, however some species appear in both of these lists. This can be for a number of reasons including:

For alligator weed and water hyacinth - that the Greater Sydney Region occurs within the core infestations of these weeds. In these cases, the regional management objectives, outcomes to demonstrate compliance with the GBD, and strategic response are given in 1.2.

The legal requirements specified in 1.1 need to be supplemented by outcomes to demonstrate compliance with the GBD in 1.2 to achieve the desired management objectives in the Greater Sydney region, e.g. Cat's claw creeper, Serrated tussock, Salvinia and some Asparagus species.



Frogbit / Spongeplant Limnobium spp



Frogbit / Spongeplant Limnobium spp

Frogbit Photographer: *Helen Poll<u>ard</u>*

1.1 STATE LEVEL DETERMINED PRIORITY WEEDS

State Priority Weed Objective - PREVENTION

The following weeds are currently not found in the state, pose significant biosecurity risk and prevention of the biosecurity risk is a reasonably practical objective

Species	Biosecurity Act requirements & Strategic Response in the region
All species of vascular plant (Tracheophyta)	Mandatory Measure (Biosecurity Act, 2015 Division 8, Clause 34) Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.
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 Rubber vine - Cryptostegia grandiflora Anchored water hyacinth - Eichhornia azurea Hawkweed - Hieracium spp (all species) Hydrocotyl/Water pennywort - Hydrocotyle ranunculoides Lagarosiphon - Lagarosiphon major Frogbit / Spongeplant - Limnobium spp. (all species) Yellow burrhead - Limnocharis flava Miconia - Miconia spp. (all species)	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. Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.



Mimosa Mimosa pigra



Parthenium weed

Mimosa Photographer: Colin G Wilson

Parthenium weed Photographer:

Bob Trounce

State Priority Weed Objective - PREVENTION

The following weeds are currently not found in the state, pose significant biosecurity risk and prevention of the biosecurity risk is a reasonably practical objective

Species

Mikania vine - Mikania micrantha

Mimosa - Mimosa pigra

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)

Water soldier - Stratiotes aloides

Witchweed - Striga spp. (except the native S. parviflora)

Water caltrop - Trapa spp. (all species)

Karoo acacia - Vachellia karroo (syn. Acacia karroo)

Prickly acacia - Vachellia nilotica (syn. Acacia nilotica)

Parthenium weed - Parthenium hysterophorus

Biosecurity Act requirements & Strategic Response in the region

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.

Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan.



Boneseed Chrysanthemoides monilifera subspecies monilifera



Tropical soda apple Solanum viarum

Tropical soda apple Photographer: Clyde Dowler

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	<i>Biosecurity Act 2015</i> requirements & Strategic Response in the region
Boneseed - Chrysanthemoides monilifera subspecies monilifera Parkinsonia - Parkinsonia aculeata Tropical soda apple - Solanum viarum	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017) A person must not move, import into the State or sell. Regional Strategic Response: Manage in accordance with the New Weed Incursion Plan

Biosecurity Control Order 2017: please refer to the Greater Sydney Regional Strategic Weed Management Plan

detailed surveillance and mapping to locate

infestations

Control measures for persons dealing with carriers: please refer to the Greater Sydney Regional Strategic Weed Management Plan

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

Species	Biosecurity Act 2015 requirements & Strategic Response in the region
Bitou bush - Chrysanthemoides monilifera subsp. rotundata	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell. Regional Strategic Response: Manage in accordance with NSW Threat Abatement Plan and Saving Our Species



Alligator weed Alternanthera hiloxeroides



Water hyacinth Eichhornia crassipes

> Alligator weed Photographer: Peter Flmer

Water hyacinth Photographer: Peter Elmer

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

Species

Alligator weed - Alternanthera philoxeroides Water hyacinth - Eichhornia crassipes

Biosecurity Act 2015 requirements & Strategic Response in the region

Biosecurity Regulation 2017 - Part 5, Division 2 (Biosecurity Zone) An owner or occupier of land in the biosecurity zone on which there is the weed must:

- (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and
- (b) eradicate the weed or, if that is not practicable. destroy as much of the weed as is practicable and suppress the spread of any remaining weed.

Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not move, import into the State or sell. Regional Strategic Response: Refer 1.2

Containment.



Cat's claw creeper Dolichandra unguis-cati



African boxthorn Lycium ferocissimum

Cat's claw creeper Photographer: Peter Elmer

African boxthorn
Photographer:
Helen Pollard

State Priority Weed Objective - ASSET PROTECTION (Whole of State)

These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.

Species

Madeira vine - Anredera cordifolia

Asparagus weeds - Asparagus aethiopicus, † A. africanus, A. asparagoides including the Western Cape form*,

A. plumosus, and A. scandens

†Cabomba - Cabomba caroliniana

†Scotch/English broom - Cytisus scoparius subsp. scoparius

†Cat's Claw Creeper - Dolichandra unguis-cati

Cape/Montpellier broom - Genista monspessulana

Flax-leaf broom - Genista linifolia

#Hymenachne - Hymenachne amplexicaulis

Bellyache bush - Jatropha gossypiifolia

Lantana - Lantana camara

African boxthorn - Lycium ferocissimum

Chilean needle grass - Nassella neesiana

††Serrated tussock - Nassella trichotoma

Opuntia- Opuntia spp., Cylindropuntia spp.,

Austrocylindropuntia spp. (Excludes O. ficus- indica)

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

Biosecurity Act requirements & Strategic Response in the region

Mandatory Measure (Division 8, Clause33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.

Regional Strategic Response:

Identify priority assets for targeted management.

Refer 1.2 Prevention.

† Refer 1.2 Eradication.

†† Refer 1.2 Containment.

† Refer 1.2 Asset Protection



Sagittaria Sagittaria platphylla



Salvinia Salvinia molesta

Sagittaria Photographer: Peter Elmer

Salvinia Photographer: Peter Flmer

State Priority Weed Objective - ASSET PROTECTION (Whole of State)

These weeds are widely distributed in some areas of the State. As Weeds of National Significance, their spread must be minimised to protect priority assets.

Species

Sagittaria - Sagittaria platyphylla

†Willows - Salix spp.(excludes S.babylonica, S.X calodendron

and *S. x reichardtiji*)

††Salvinia - Salvinia molesta

Fireweed - Senecio madagascariensis

Silver-leaf nightshade - Solanum elaeagnifolium

Athel pine - Tamarix aphylla

††Gorse - Ulex europaeus

Biosecurity Act requirements & Strategic Response in the region

Mandatory Measure (Division 8, Clause33, Biosecurity Regulation 2017): A person must not move, import into the State or sell.

Regional Strategic Response:

 $Identify\ priority\ assets\ for\ targeted\ management.$

Refer 1.2 Prevention.

† Refer 1.2 Eradication.

†† Refer 1.2 Containment.

‡ Refer 1.2 Asset Protection



Water lettuce
Pistia stratiotes



Spanish broom
Spartium junceum

Water lettuce Photographer: Helen Pollard

Spanish broom Photographer: Andy Steed

1.2 REGIONAL PRIORITY WEEDS

Regional Priority Weed Objective - PREVENTION

The following weeds are currently not found in the Greater Sydney region, pose significant biosecurity risk and prevention of the biosecurity risk posed by these weeds is a reasonably practical objective

Species Chinese violet - Asystasia gangetica subsp. micrantha 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

The plant is eradicated from the land and the land is kept free of the plant.

Land managers mitigate the risk of the plant being introduced to their land.

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

Strategic response in the region

Implement quarantine and/or hygiene protocols
Undertake high risk sites & pathways analysis to identify potential introduction areas and preventative options
Have a collaborative rapid response protocol in place
Supporting documents: New

Weed Incursion Plan (includes rapid response protocol) Look, Learn, Act Community awareness program



Climbing asparagus Asparagus africanus



Ming fern Asparagus macowanii var.

Climbing asparagus Photographer: Peter Elmer

> Ming fern Photographer: Peter Elmer

Regional Priority Weed Objective - ERADICATION

Sicilian sea lavender - Limonium

Sicklethorn - Asparagus falcatus

Skunk vine - Paederia foetida

hyblaeum

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

by these weeds is a reasonably practical objective		
Species	Outcomes to demonstrate compliance with the GBD	Strategic response in the region
Black willow - Salix nigra Climbing asparagus - Asparagus africanus Grey sallow - Salix cinerea	The plant is eradicated from the land and the land is kept free of the plant. Local Control Authority is notified if the plant is found on the land. The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation, 2017): A person must not move, import into the State or sell.	 Destruction of all infestations where feasible. Manage in accordance with New Weed Incursion Plan. Detailed surveillance and mapping to locate all infestations. Implement quarantine and/or hygiene protocols.
Chinese knotweed - Persicaria chinensis Hygrophilla - Hygrophilla costata Kei apple - Dovyalis caffra Kidney leaf mud plantain - Heteranthera reniformis Kudzu - Pueraria lobata Leaf cactus - Pereskia aculeata Ming fern - Asparagus macowanii var. zuluensis Mysore thorn - Caesalpinia decapetala	 The plant is eradicated from the land and the land is kept free of the plant. Local Control Authority is notified if the plant is found on the land. The plant or parts of the plant are not traded, carried, grown or released into the environment 	 Destruction of all infestations where feasible. Manage in accordance with New Weed Incursion Plan. Detailed surveillance and mapping to locate all infestations. Implement quarantine and/or hygiene protocols.



African olive Olea europaea subsp. cuspidata



Alligator weed Alternanthera philoxeroides

African olive Photographer: John Hosking

Alligator weed Photographer: Peter Elmer

Regional Priority Weeds objective - CONTAINMENT

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

tion of the biosecurity risk posed by these weeds is reasonably practicable.	
Species	Land area where requirements apply and outcomes to demonstrate compliance with the GBD
African olive - <i>Olea europaea</i> subsp. <i>cuspidata</i>	An exclusion zone is established for all lands in the Blue Mountains and Central Coast local government areas. The remainder of the region is classified as the core infestation area. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Alligator weed - Alternanthera philoxeroides	An exclusion zone is established for all lands in the Blue Mountains local government areas. The remainder of the region is classified as the core infestation area. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details. The following legislative requirement also applies: Mandatory Measure (Division 8, Clause 33): A person must not move, import into the State or sell. 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.
Gorse - Ulex - europaeus	An exclusion zone is established for the Blue Mountains local government area. The remainder of the region is classified as the core infestation area. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Holly-leaved senecio - <i>Senecio</i> glastifolius	An exclusion zone is established for the whole of the region except the Royal National Park. The Royal National Park is classified as the core infestation area . Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.



Horsetails Gymnocoronis spilanthoides



Senegal tea Gymnocoronis spilanthoides

Horsetails Photographer: NSW DPI

Senegal tea Photographer: *Peter Elmer*

Regional Priority Weeds objective - CONTAINMENT

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

of the biosecurity risk posed by these weeds is reasonably practicable.	
Species	Land area where requirements apply and outcomes to demonstrate compliance with the GBD
Horsetails - Equisetum spp.	An exclusion zone is established for whole of region except Northern Beaches local government area. The Northern Beaches local government area is classified as the core infestation area . Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Salvinia - Salvinia molesta	An exclusion zone 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 core infestation area . Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Sea spurge <i>- Euphorbia paralias</i>	An exclusion zone is established for whole of region except Sutherland local government area. Sutherland local government areas is classified as the core infestation area. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Senegal tea - <i>Gymnocoronis</i> spilanthoides	An exclusion zone is established for all lands in the region, excluding areas comprising Wollondilly and Camden local government areas, which will be known as the core infestation area . Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Serrated tussock - Nassella trichotoma	An exclusion zone is established for all lands in the region, excluding areas comprising Wollondilly and Camden local government areas, which will be known as the core infestation area. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.



Water poppy Hydrocleys nymphoides



Cat's claw creeper Dolichandra unguis-cati

Water poppy
Photographer:
Bio Security Queensland

Cat's claw creeper Photographer: Peter Elmer

Regional Priority Weeds objective - CONTAINMENT

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

of the biosecurity risk posed by these weeds is reasonably practicable.		
Species	Land area where requirements apply and outcomes to demonstrate compliance with the GBD	
Water poppy - Hydrocleys nymphoides	An exclusion zone is established for all lands (and waters) in the region, excluding areas comprising the Hacking River Catchment, which will be known as the core infestation area . Please see the Greater Sydney Regional Strategic Weed Management Plan for further details	
Regional Priority Weeds object	Regional Priority Weeds objective - ASSET PROTECTION	
Species	Strategic response to be demonstrated within the GBD	
Cat's claw creeper - Dolichandra unguis-cati	The following legislative requirement also applies: <i>Mandatory Measure</i> (<i>Division 8, Clause 33</i>): A person must not move, import into the State or sell. The plant should be fully and continuously suppressed and destroyed Identify priority assets for targeted management Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans. Please see the Greater Sydney Regional Strategic Weed Management	

Plan for further details.

Cabomba - Cabomba caroliniana

The plant should be fully and continuously suppressed and destroyed Implement quarantine and/or hygiene protocols.

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

Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.



Green cestrum Cestrum parqui



Pampas grass Cortaderia jubata

Green cestrum Photographer: *Helen Pollard*

Pampas grass Photographer: *Peter Elmer*

Regional Priority Weeds objective - ASSET PROTECTION	
Species	Strategic response to be demonstrated within the GBD
Giant reed – Arundo donax	The plant should be fully and continuously suppressed and destroyed Implement quarantine and/or hygiene protocols. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Green cestrum - Cestrum parqui	The plant should be fully and continuously suppressed and destroyed on grazing land . Implement quarantine and/or hygiene protocols. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Pampas grass - Cortaderia jubata	The plant should be fully and continuously suppressed and destroyed. Identify priority assets for targeted management The plant or parts of the plant are not traded, carried, grown or released into the environment Please see the Greater Sydney Regional Strategic Weed Management Plan for further details
Scotch/English Broom - Cytisus scoparius	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. The following legislative requirement also applies: <i>Mandatory Measure (Division 8, Clause 33)</i> : A person must not move, import into the State or sell. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.



Singapore daisy Sphagneticola trilobata



Water hyacinth Eichhornia crassipes

Singapore daisy Photographer: *Eurico Zimbres*

Water hyacinth Photographer: *Peter Elmer*

Species	Strategic response to be demonstrated within the GBD
singapore daisy <i>- Sphagneticola</i> Prilobata	Manage in accordance with New Weed Incursion Plan Implement quarantine and/or hygiene protocols. Identify priority assets Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.
Water hyacinth - Eichhornia crassipes	Develop and implement Community Campaign Promote best practice principles to landholders, including a range of control techniques for integrated weed management; maintaining competitive vegetation/crops/pastures, hygiene and property management plans. The following legislative requirement also applies: <i>Mandatory Measure (Division 8, Clause 33</i>): A person must not move, import into the State or sell. Note a Biosecurity Zone applies to this species under Part 5 of Divisior 2 of the Biosecurity Regulation 2017. However this does not apply to the Greater Sydney region. Please see the Greater Sydney Regional Strategic Weed Management Plan for further details.



Willow-leaf primrose Ludwigia peruviana



Willow-leaf primrose Ludwigia peruviana

Regional Priority Weeds objective - ASSET PROTECTION

Species

Strategic response to be demonstrated within the GBD

Willow-leaf primrose/ Water primrose - *Ludwigia peruviana*

The plant should be fully and continuously suppressed and destroyed. Identify priority assets for targeted management.

Land managers mitigate the risk of the plant being introduced to their land.

Land managers prevent spread from their land where feasible.

Land managers reduce the impact on priority assets.

The plant or parts of the plant are not traded, carried, grown or released into the environment.

Local Control Authority is notified if the plant is found on the land.

Willow-leaf primrose Photographer: Graham Pritchard