



Western Regional Strategic Weed Management Plan 2023-2027

Acknowledgement of Country

Western Local Land Services acknowledges the Traditional Custodians of the land and pays respect to Elders past, present and emerging. We also recognise the unique, diverse and enduring cultures of First Nations peoples in NSW. Obligations to care for Country remain integral to Aboriginal and Torres Strait Islander lore, identity, culture and social and emotional well-being. The way in which traditional lands are being managed is of great interest to First Nations communities and Local Land Services understands that Aboriginal and Torres Strait Islander peoples have a significant contribution to make in relation to land management in the region.



This document is not a weed identification or control guide.
For this information please go to [WeedWise](#) or your local control authority.

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Western Regional Strategic Weed Management Plan 2023-2027

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Acknowledgement of contributors

The Regional Strategic Weed Management Plan was developed by the Western Regional Weed Committee on behalf of the Western Local Land Services Board for endorsement by the board. The Western Local Land Services Board wishes to acknowledge the work of the committee and regional support staff in developing the Western Regional Strategic Weed Management Plan from Local Land Services and the NSW Department of Primary Industries.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing July 2022. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser.

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Western Local Land Services Chair's foreword



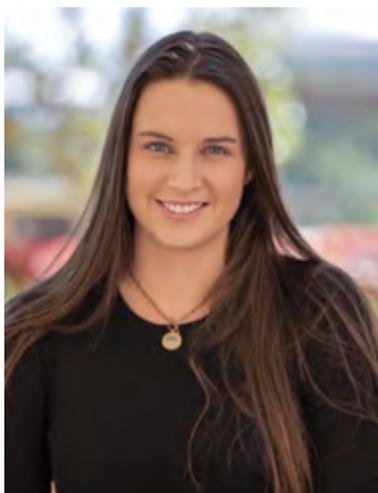
Western Local Land Services has been established to deliver efficient and effective integrated services associated with agricultural production, biosecurity, natural resource management and emergency management, with great importance based upon a regional delivery focus.

I would like to thank the members of the Western Regional Weed Committee, council weed officers and other agency stakeholders who contributed to the development of this document with their expertise and time.

I look forward to working with the Western Regional Weed Committee, partnering organisations and stakeholders in implementing the Western Regional Strategic Weed Management Plan and providing quality and meaningful outcomes across the Western region.

Magnus Aitken
Chair
Western Local Land Services

Western Regional Weed Committee Chair's foreword



I am pleased to present the Western Regional Strategic Weed Management Plan on behalf of Western Local Land Services, member councils and stakeholders of the Western Regional Weed Committee.

The Regional Strategic Weed Management Plan prioritises weeds into various landscapes and details action plans. It is a document to be used by a wide cross section of the community responsible for land management.

The Western Regional Strategic Weed Management Plan has been developed through a strategic review of key national, state, regional operational plans and strategies, and NSW legislation including:

- Australian Weeds Strategy
- 20-Year Economic Vision for Regional NSW
- *Local Land Services Act 2013*
- NSW Biosecurity Strategy
- *NSW Biosecurity Act 2015*
- NSW Invasive Species Plan
- Local Land Services State Strategic Plan
- Western Local Land Services Local Strategic Plan

The Western Regional Strategic Weed Management Plan aims to provide all landholders and stakeholders with the knowledge and tools to make informed decisions in weed management and control, taking into account the limited resources and funds available.

Central to the success of this plan is the need to continue to build ownership by the whole community, taking a regional co-ordinated and co-operative approach with an appreciation by all stakeholders of their responsibilities and contributions to better manage weeds within the Western Local Land Services region.

Kate McBride

Chair

Western Regional Weed Committee

Executive summary

Biosecurity protects the economy, environment, and community from the negative impacts of pests, diseases, and weeds. As such, it is vital for the health, wellbeing, and prosperity of the state.

The Western Regional Strategic Weed Management Plan focuses on managing weeds to improve the region's biosecurity. This plan details priorities of weed management to protect the Western region's environment, economy, and community from the negative impacts of weeds, strengthening the sustainability of the region's natural environment, primary industries, and local communities.

The NSW Biosecurity Strategy, the NSW *Biosecurity Act 2015*, state and regional strategies and plans are mutually supportive and inclusive of the Regional Strategic Weed Management Plan and are designed to work dynamically and effectively with Commonwealth biosecurity measures reforming weed, pest, and disease legislation for NSW in a consistent manner.

Together, these strategies and plans at all levels, provide a clear framework for safeguarding primary industries, natural environments, and communities from a vast range of pests, diseases and weeds in a manner that can be implemented more cooperatively, consistently across tenures supporting more effective management across the state.

Three crucial factors in realising the vision of a sustainable and prosperous future across NSW in the area of biosecurity weed management are:

- better understanding of the benefits of community-wide shared responsibility for biosecurity
- cooperative weed management with a tenure-neutral approach across jurisdictional boundaries
- effective and supportive legislation since the implementation of the NSW *Biosecurity Act in 2015*.

The Western Regional Strategic Weed Management Plan was prepared by the Western Regional Weed Committee on behalf of the Western Local Land Services Board, in consultation with State Government and Local Land Services staff.

The plan outlines how government, industry and the community will share responsibility and work together to identify, minimise, respond to, and manage weeds.

The plan is applicable to all lands and waters in the Western region and focuses on managing weeds that impact:

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

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

1. Intent of Regional Strategic Weed Management Plan

1.1 Introduction and scope

Weeds are a major threat to Australia's natural environment. In 2018, the Centre for Invasive Species Solutions estimated that the total annual cost of weeds in NSW ranged from \$1.67 billion to \$1.9 billion per annum (McLeod, 2018). Impacts on biodiversity and natural environments are harder to quantify, but equally significant.

The Regional Strategic Weed Management Plan intends to prioritise the most important weeds in the region and guide management efforts.

Government, industry and the community can work together to protect the environment, community and economy from the negative impacts of weeds.

Regional Strategic Weed Management Plans play an important role in articulating the shared responsibility principle of the NSW *Biosecurity Act 2015* (the Act) and communicating weed control obligations.

As per [s.15 of the Act](#), the Plan prioritises weeds that:

- out-compete other organisms for resources
- cause harm to other organisms through toxicity
- otherwise reduce the productivity of agricultural systems or the value of agricultural products
- damage infrastructure
- reduce the amenity or aesthetic value of premises
- harm or reduce biodiversity.

Shared responsibility

The vision of shared responsibility is: “Government, industry and the people of NSW working together to protect the economy, environment and community from the negative impacts of animal and plant pests, diseases and weeds for the benefit of the people of NSW”.

(NSW Biosecurity Strategy 2013-2021).

The Western Regional Strategic Weed Management Plan (the Plan):

- is a local strategic plan under the *Local Land Services Act 2013*.
- implements the NSW Biosecurity Strategy and NSW Invasive Species Plan in relation to weeds for the Western region.
- has been prepared by the Western Regional Weed Committee on behalf of Western Local Land Services Board.
- explains how each region will work together to identify, minimise, respond to and manage priority weeds, supporting the idea of a shared responsibility under the biosecurity legislation.

The plan provides information to enable all landholders and stakeholders to effectively discharge their obligations under the Act.

For this reason, the Plan does not include prescriptive measures for landholders and stakeholders to discharge their biosecurity duties. The Plan focuses on the outcomes to be achieved, allowing for different measures to achieve the same outcome.

At the regional level, the Plan focuses on the management of weeds that have been assessed by the Western Regional Weed Committee as posing a significant risk of doing these things at the regional scale and having a high feasibility of coordinated control.

To ensure responsibility is shared across government, community and industry, the Plan applies equally to all people and all land in NSW.

1.2 Vision and goals

The Plan's vision is:

Government, agricultural industries and the people of the Western region working together to protect the environment, economy and community from the negative impacts of weeds for the benefit of all in the state.

The Regional Strategic Weed Management Plan provides the basis for a co-operative and co-ordinated approach to weed management.

The Plan identifies regional priorities for weed management and outlines how government agencies, community groups and individual landholders will share responsibility and work together across land tenures to prevent, eradicate, contain and manage the impacts of weeds.

The vision, goals and outcomes for this plan align with those of the NSW Invasive Species Plan and the Local Land Services State Strategic Plan.

This aligns with the Local Land Services State Strategic Plan vision of *Vibrant communities in productive healthy landscapes, which delivers on the state outcome of productive and sustainable landscapes.*

The Plan adopts the four goals outlined in the NSW Invasive Species Plan.

Goal 1:

Exclude – prevent the establishment of new invasive species.

Goal 2:

Eradicate or contain – eliminate, or prevent the spread of new invasive species.

Goal 3:

Effectively manage – reduce the impacts of widespread invasive species.

Goal 4:

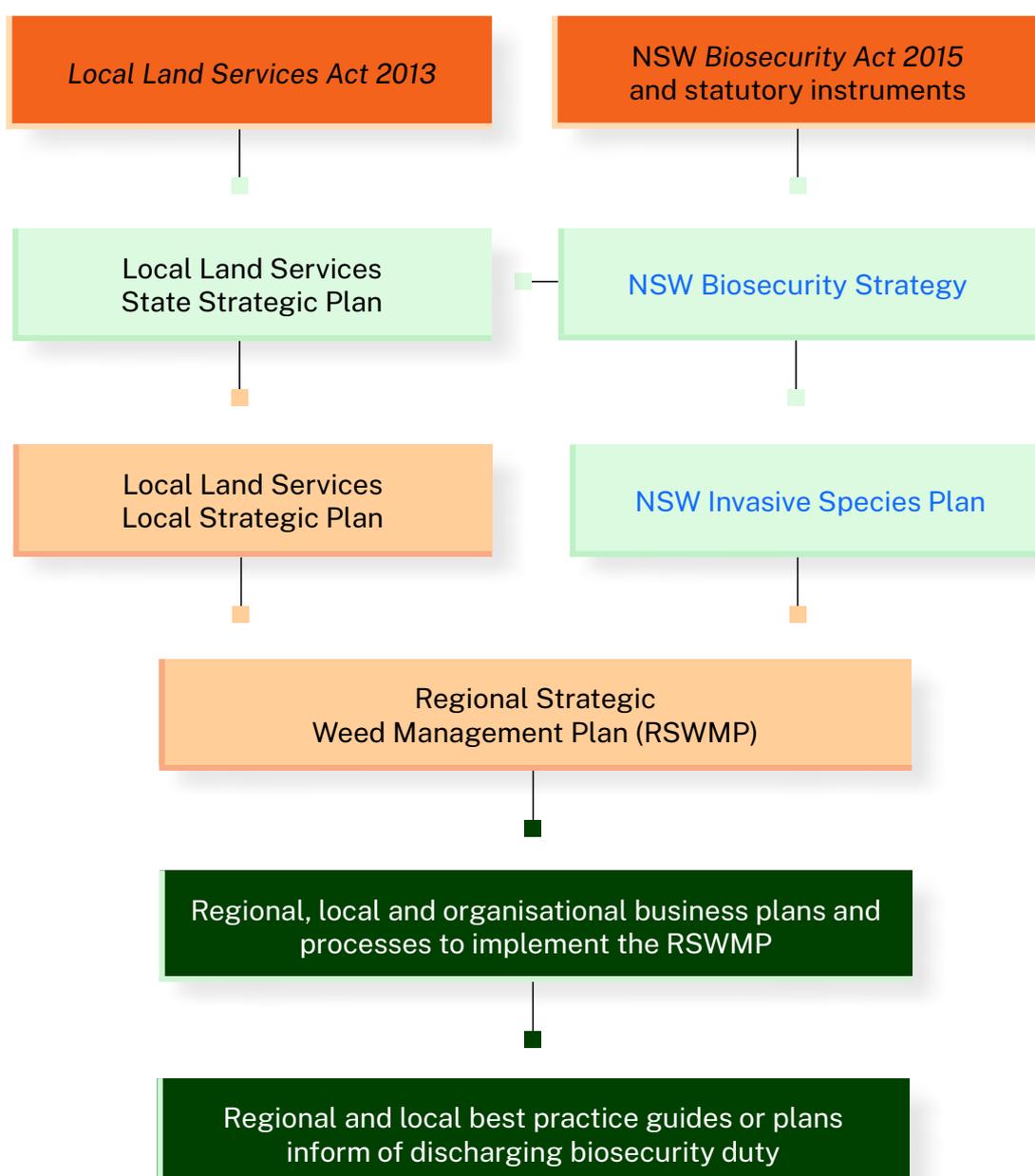
Capacity building – ensure NSW has the ability and commitment to manage invasive species.

2. Policy and planning framework

2.1 Overview of key plans and legislation

The regional weed committee has considered a range of plans and strategies directly relevant to development of this Plan, at national, state and local levels. These are shown in Figure 2.1.

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



2.2 NSW Biosecurity Act 2015

The NSW [Biosecurity Act 2015](#) (the Act) is the key legislation directing weed management and the implementation of this plan. This Act is administered by NSW Department of Primary Industries.

The Act provides a framework for the prevention, elimination and minimisation of biosecurity risks posed by:

- biosecurity matter such as weeds
- dealings with biosecurity matter such as weeds
- carriers of biosecurity matter.

It:

- promotes the principle of government, industry and the community sharing responsibility for biosecurity risks (including weeds)
- applies equally to all land in the state, regardless of tenure, and to all people
- is premised on the concept of risk, so that weed management investment and response is appropriate to the risk.

Local control authorities have weed control functions under s.371 of the Act, and must:

- prevent, eliminate, minimise and manage the biosecurity risk posed or likely to be posed by weeds on their lands
- develop, implement, coordinate and review weed control programs
- inspect land in connection with their functions under the Act
- keep records about the exercise of their functions under the Act
- report to the Secretary about the exercise of their functions under the Act.

Local control authority includes the council of a local government area, or the person appointed by the Minister as the local control authority for specific land.

In the case of land within the Western Division that is not within a local government area (ie. unincorporated) the local control authority is Crown Lands. Local control authorities appoint authorised officers who can exercise the powers available under the Act. This enables the local control authority to deliver these functions.

Local control authority

The council of a local government area is the local control authority for land within that local government area unless the weed control functions for that area have been conferred on a county council or joint organisation (within the meaning of the [Local Government Act 1993](#)) under any other Act. If the weed control functions for an area have been conferred on a county council or joint organisation, the county council or joint organisation is the local control authority for that area.

General biosecurity duty

In keeping with its premise that biosecurity is a shared community, industry and government responsibility, the Act introduces the legally enforceable concept of a **general biosecurity duty**.

Under the Act, **all** people who deal with plants through their commercial, professional, volunteer, recreational or lifestyle activities have a duty to be aware of the impacts the plants they deal with might cause, and must take action to remove or reduce the likelihood of those impacts occurring.

[Section 22 of the NSW Biosecurity Act 2015](#)

Dealings

The definition of “dealings” includes keep, have possession, care, custody or control of, produce, manufacture or supply, import, acquire, buy, sell, swap, dispose of, move, release, use, breed, propagate, grow, raise, feed or culture, experiment with, display, enter into an agreement or other arrangement which another person deals with, agree to deal with, cause or permit a dealing with or anything prescribed by the regulations as a dealing with, or engaging in a dealing with, biosecurity matter or a carrier.

[Section 12 of the NSW Biosecurity Act 2015](#)

Authorised officers are appointed under the NSW *Biosecurity Act 2015* by local control authorities. They carry out local control authority functions by exercising the powers and regulatory tools available to them under the Act, and implement compliance programs.

Biosecurity management tools

Table 2.1: Tools available to authorised officers under the NSW *Biosecurity Act 2015* and the NSW *Biosecurity Regulation 2017* to manage weed risk.

Prohibited matter

It is an offence to deal with any prohibited weed species listed in Schedule 2, Part 1 of the NSW *Biosecurity Act 2015*. People have a legally enforceable duty to prevent, eliminate, and minimise the biosecurity risk posed by prohibited matter. People must notify the local control authority about the presence of prohibited matter or suspected prohibited matter.

Control order

Control orders establish control zones and related measures to prevent, eliminate, minimise or manage a biosecurity risk or impact. Species regulated under a control order must be immediately destroyed and the land kept free of that species. Control orders are used to manage weeds under approved eradication programs and last for a maximum duration of five years (or can be renewed for longer-term eradication programs).

Biosecurity zone

Biosecurity zones specify the measures (eradication, destruction or suppression of spread) that must be taken in a defined area to manage the weed. Biosecurity zone regulation is used to manage weeds that pose a medium risk over an extended period where the focus is on eradication and containment and on minimising the risk of spread and impact in the affected area. It is used where different management actions are required in different parts of NSW or to protect a portion of the state from the introduction of a particular biosecurity risk.

Mandatory measures

Mandatory measures require people to take specific actions with respect to certain weeds or carriers of weeds. It is prohibited to sell or import weeds listed in Schedule 3 of the NSW *Biosecurity Regulation 2017*. It is prohibited to import farm equipment from Queensland into NSW including grain harvesters, comb trailers, bins used for holding grain during harvest operations, augers, vehicles used for transporting grain harvesters, support vehicles for grain harvesters and mineral exploration drilling rigs and vehicles used to transport those rigs. It is prohibited to import into the state new species of vascular plants not currently present in the state.

General biosecurity duty

Any person who deals with a plant that poses a risk of causing an adverse effect on the economy, the environment or the community and who knows, or ought to know about the risk the plant poses, has a legally enforceable duty to prevent, eliminate or minimise the risk of that impact occurring.

Biosecurity direction

An authorised officer may issue a biosecurity direction that directs a person or class of persons to do or to cease doing something, if the officer reasonably believes it is necessary to prevent, eliminate or minimise a biosecurity risk or to prevent, manage or control a biosecurity impact. It is an offence not to comply with a biosecurity direction.

Biosecurity undertaking

A biosecurity undertaking is a written undertaking by a person, that specifies the measures a person agrees to implement to remedy a contravention, likely contravention, or suspected contravention of the Act and a date by which those measures will be implemented by. It is an offence to contravene a biosecurity undertaking.

3. Weed risk assessment and prioritisation

Weeds are regulated under the NSW *Biosecurity Act 2015* according to the risk they pose to the environment, community and economy. Weeds that create the highest level of risk and have the feasibility of being controlled are called priority weeds.

Management action, investment and compliance effort should be directed toward priority weeds. Risk-based decision-making and weed prioritisation ensures that the weeds management response is:

- reasonably practicable
- matched to the degree of risk posed
- flexible and non-prescriptive.

The weed prioritisation process used in this Plan is guided by the principle that managing new weeds earlier rather than later is the most efficient and cost-effective way to protect local communities, environments and industries from the impacts of weeds in the long-term.

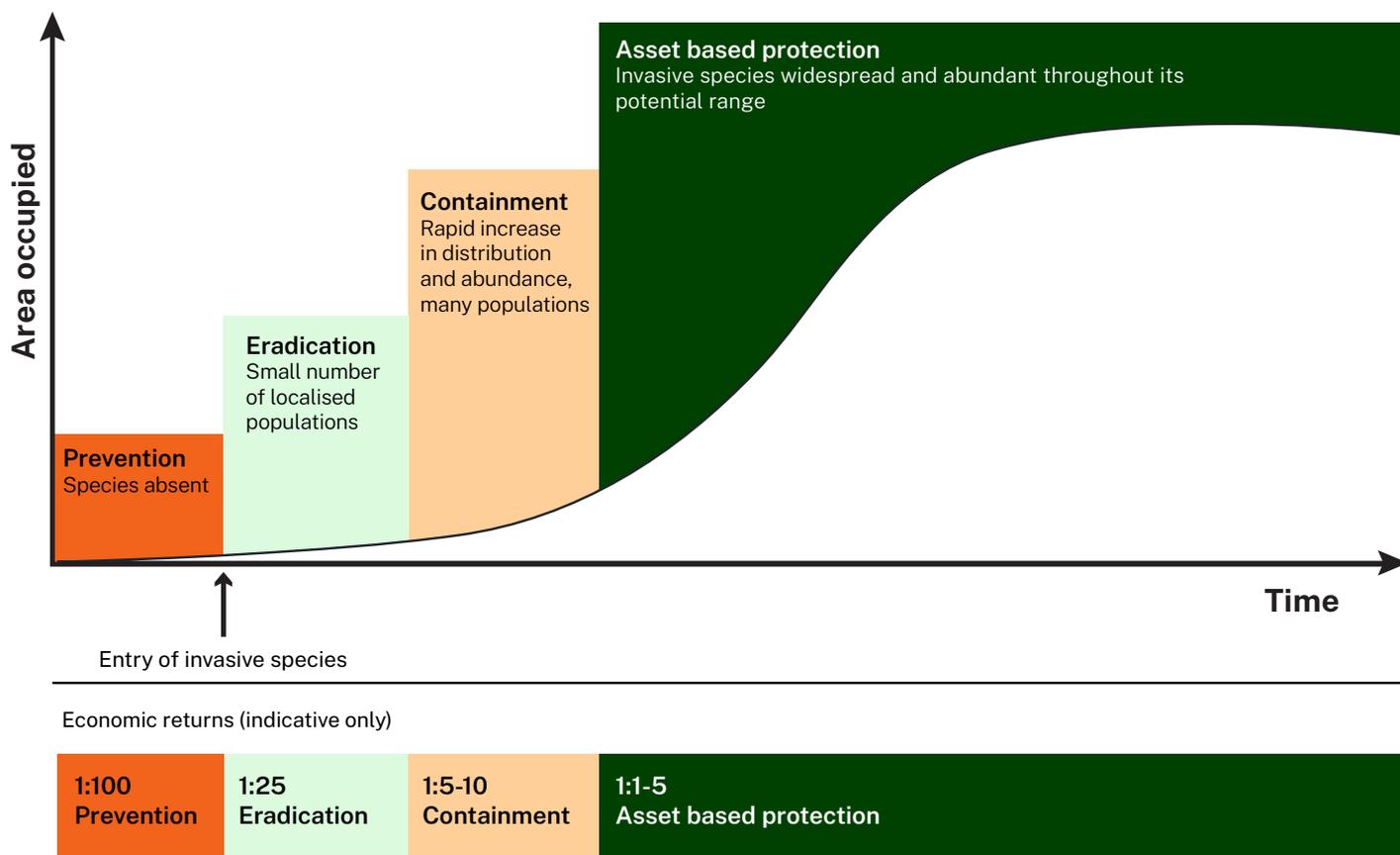
The generalised ‘weed invasion curve’ (Figure 3.1) illustrates the invasion process of weeds from arrival to widespread establishment after research showed that the effort and resources required to control a weed rises with time and area occupied.

The NSW Weed Risk Management system is the decision-support tool that is used to help determine which weeds should be prioritised. The system provides a standard, nationally accepted and transparent process that considers two components for prioritising weeds for management action:

1. weed risk (invasiveness, impacts, potential distribution)
2. feasibility of coordinated control (control costs, persistence, current distribution).

It is applied at different scales. Weeds that receive high scores for both components are prioritised at that scale. Further information on the NSW Weed Risk Management system is available at the [NSW Department of Primary Industries website](#).

Figure 3.1: Generalised weed invasion curve illustrating actions appropriate to each stage and indicative return on investment.



3.1 State priority weeds

State priority weeds have been assessed by NSW Department of Primary Industries as posing a high to medium biosecurity risk to the entire state of NSW and are identified in Table 3.1 below.

Further information on state priority weeds can be found in [Appendix 1.1](#) of this Plan. Specific legal requirements apply to state priority weeds.

State priority weeds are regulated through the following tools as listed in Table 2.1:

- prohibited matter
- control orders
- biosecurity zones
- mandatory measures.

Table 3.1: State priority weeds.

Common name	Scientific name	Regulatory tool
African boxthorn	<i>Lycium ferocissimum</i>	Mandatory Measure prohibits sale within or import into NSW
Alligator weed	<i>Alternanthera philoxeroides</i>	Alligator Weed Biosecurity Zone applies in some parts of NSW Mandatory Measure prohibits sale within or import into NSW
All species of vascular plant	<i>Tracheophyta</i>	Mandatory Measure prohibits import into NSW if the species is not already present in the State
Anchored water hyacinth	<i>Eichhornia azurea</i>	Prohibited Matter in NSW
Asparagus weeds	<i>Asparagus aethiopicus</i> , <i>A. africanus</i> , <i>A. asparagoides</i> including the western cape form*, <i>A. plumosus</i> , and <i>A. scandens</i>	Mandatory Measure prohibits sale within or import into NSW
Athel pine	<i>Tamarix aphylla</i>	Mandatory Measure prohibits sale within or import into NSW
Bellyache bush	<i>Jatropha gossypifolia</i>	Mandatory Measure prohibits sale within or import into NSW
Bitou bush	<i>Chrysanthemoides monilifera subsp. Rotundata</i>	Bitou Bush Biosecurity Zone applies in some parts of NSW Mandatory Measure prohibits sale within or import into NSW
Blackberry	<i>Rubus fruticosus</i> spp. agg. (except the varieties chester thornless, dirksen thornless, loch ness, silvan, black satin, murrindindi, smooth stem, thornfree and chehalem)	Mandatory Measure prohibits sale within or import into NSW
Black knapweed	<i>Centaurea x moncktonii</i>	Prohibited Matter in NSW
Boneseed	<i>Chrysanthemoides monilifera subsp. monilifera</i>	Biosecurity (Boneseed) Control Order 2022 applies in NSW Mandatory Measure prohibits sale within or import into NSW
Bridal veil creeper	<i>Asparagus declinatus</i>	Prohibited Matter in NSW
Broomrape	<i>Orobancha</i> spp. (all species except the native <i>O. cernua</i> var. <i>australiana</i> and <i>O. minor</i>)	Prohibited Matter in NSW

Common name	Scientific name	Regulatory tool
Brooms	<i>Genista monspessulana</i> , <i>G. linifolia</i> , <i>Cystisus scoparius</i>	Mandatory Measure prohibits sale within or import into NSW
Cabomba	<i>Cabomba caroliniana</i>	Mandatory Measure prohibits sale within or import into NSW
Cat's claw creeper	<i>Dolichandra unguis-cati</i>	Mandatory Measure prohibits sale within or import into NSW
Chilean needle grass	<i>Nassella neesiana</i>	Mandatory Measure prohibits sale within or import into NSW
Chinese violet	<i>Asystasia gangetica subsp. micrantha</i>	Biosecurity (Chinese Violet) Control Order 2019 applies in NSW
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	Prohibited Matter in NSW
Fireweed	<i>Senecio madagascariensis</i>	Mandatory Measure prohibits sale within or import into NSW
Frogbit / Spongeplant	<i>Limnobium spp.</i> (all species)	Prohibited Matter in NSW
Gamba grass	<i>Andropogon gayanus</i>	Prohibited Matter in NSW
Gorse	<i>Ulex europaeus</i>	Mandatory Measure prohibits sale within or import into NSW
Hawkweed	<i>Pilosella spp</i> (all species) in addition to <i>Hieracium spp</i> (all species except <i>Hieracium murorum</i>)	Prohibited Matter in NSW
Hydrocotyl/Water pennywort	<i>Hydrocotyle ranunculoides</i>	Prohibited Matter in NSW
Hymenachne	<i>Hymenachne amplexicaulis</i>	Mandatory Measure prohibits sale within or import into NSW
Karoo acacia	<i>Vachellia karroo</i> (syn. <i>Acacia karroo</i>)	Prohibited Matter in NSW
Kochia	<i>Bassia scoparia</i> (excluding subsp. <i>trichophylla</i>)	Prohibited Matter in NSW
Koster's curse	<i>Clidemia hirta</i>	Prohibited Matter in NSW
Lagarosiphon	<i>Lagarosiphon major</i>	Prohibited Matter in NSW
Lantana	<i>Lantana camara</i>	Mandatory Measure prohibits sale within or import into NSW
Madeira vine	<i>Anredera cordifolia</i>	Mandatory Measure prohibits sale within or import into NSW
Mesquite	<i>Prosopis spp</i>	Mandatory Measure prohibits sale within or import into NSW
Mexican feather grass	<i>Nassella tenuissima</i> (syn. <i>Stipa tenuissima</i>)	Prohibited Matter in NSW
Miconia	<i>Miconia spp.</i> (all species)	Prohibited Matter in NSW
Mikania vine	<i>Mikania micrantha</i>	Prohibited Matter in NSW
Mimosa	<i>Mimosa pigra</i>	Prohibited Matter in NSW

Common name	Scientific name	Regulatory tool
Parkinsonia	<i>Parkinsonia aculeata</i>	Biosecurity (Parkinsonia) Control Order 2022 applies in NSW Mandatory Measure prohibits sale within or import into NSW
Parthenium weed	<i>Parthenium hysterophorus</i>	Prohibited Matter in NSW Mandatory Measure prohibits parthenium weed carriers from entering NSW from QLD
Pond apple	<i>Annona glabra</i>	Prohibited Matter in NSW
Prickly acacia	<i>Vachellia nilotica</i> (syn. <i>Acacia nilotica</i>)	Prohibited Matter in NSW
Prickly pears	<i>Opuntia</i> spp. (excluding <i>O. ficus-indica</i>), <i>Cylindropuntia</i> spp. and <i>Austrocylindropuntia</i> spp.	Mandatory Measure prohibits sale within or import into NSW
Rubber vine	<i>Cryptostegia grandiflora</i>	Prohibited Matter in NSW
Sagittaria	<i>Sagittaria platyphylla</i>	Mandatory Measure prohibits sale within or import into NSW
Salvinia	<i>Salvinia molesta</i>	Mandatory Measure prohibits sale within or import into NSW
Serrated tussock	<i>Nassella trichotoma</i>	Mandatory Measure prohibits sale within or import into NSW
Siam weed	<i>Chromolaena odorata</i>	Prohibited Matter in NSW
Silver-leaf nightshade	<i>Solanum elaeagnifolium</i>	Mandatory Measure prohibits sale within or import into NSW
Spotted knapweed	<i>Centaurea stoebe</i> subsp. <i>australis</i>	Prohibited Matter in NSW
Tropical soda apple	<i>Solanum viarum</i>	Biosecurity (Tropical Soda Apple) Control Order 2022 applies in NSW Mandatory Measure prohibits sale within or import into NSW
Water caltrop	<i>Trapa</i> spp. (all species)	Prohibited Matter in NSW
Water hyacinth	<i>Eichhornia crassipes</i>	Water Hyacinth Biosecurity Zone applies in some parts of NSW Mandatory Measure prohibits sale within or import into NSW
Water soldier	<i>Stratiotes aloides</i>	Prohibited Matter in NSW
Willows	<i>Salix</i> species except <i>S. babylonica</i> , <i>S. X calodendron</i> and <i>S. x reichardtiji</i> (willows except weeping willows, pussy willow and sterile pussy willow)	Mandatory Measure prohibits sale within or import into NSW
Witchweed	<i>Striga</i> spp. (except the native <i>S. parviflora</i>)	Prohibited Matter in NSW
Yellow burrhead	<i>Limnocharis flava</i>	Prohibited Matter in NSW

4. Weed management in the region

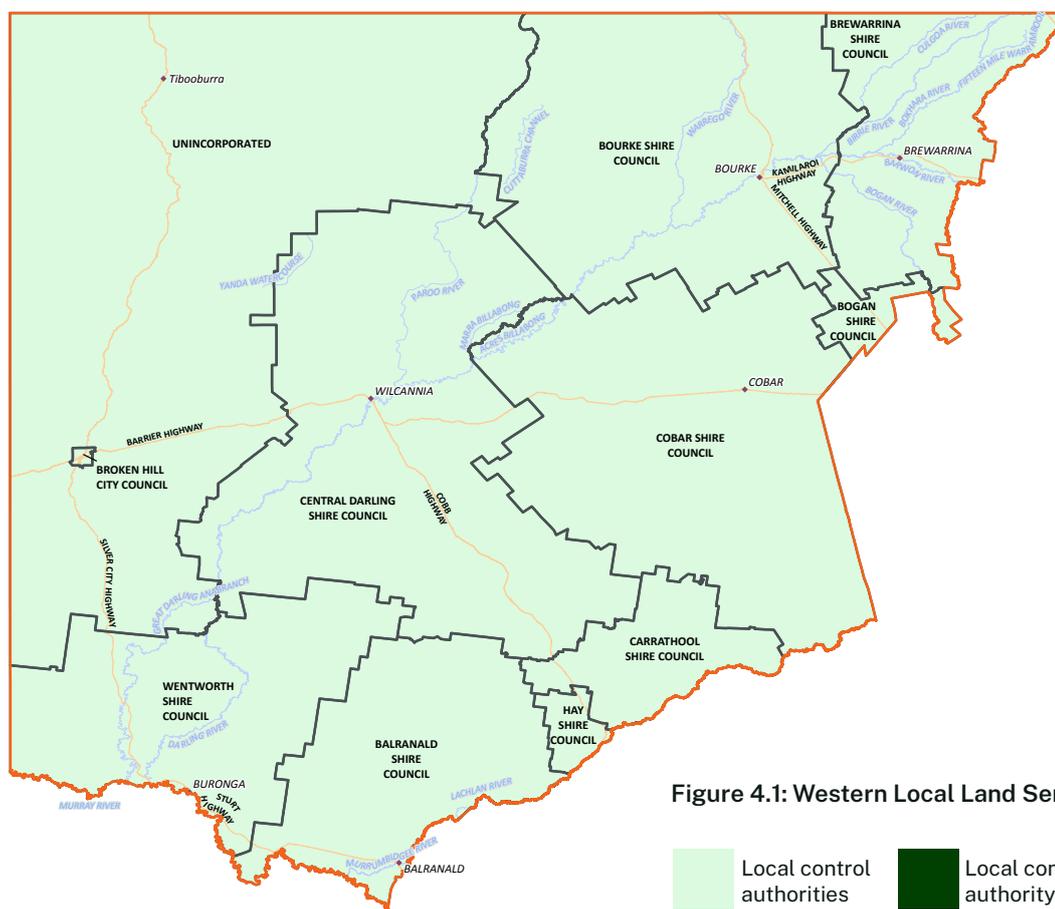
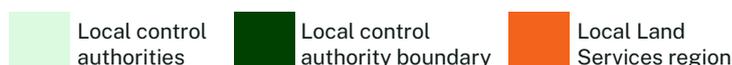


Figure 4.1: Western Local Land Services regional map.



4.1 Introduction to region

The Western region is the largest Local Land Services region in NSW, covering 314,500km², or 40% of the state.

Bounded to the east by the North West, Central West, Riverina and Murray Local Land Service regions, the Western region also shares a border with three states (Queensland, South Australia and Victoria) and covers an area larger than Victoria and Tasmania combined.

The region is sparsely populated; with a total population of 43,000, scattered across small towns, and two larger centres, Broken Hill and Cobar. Aboriginal people make up approximately 13% of the region's population. Nearly one-third of the area (94,000 km²) is unincorporated, meaning that it has no formal local government.

Local government areas occupy 70% of the region and include the Bourke, Brewarrina, Cobar, Central Darling, Broken Hill, Balranald and Wentworth Shires, along with parts of the Carrathool and Hay Shires. The remaining 30% is unincorporated, meaning it has no direct local government, and is Crown Land administered under the *Crown Land Management Act 2016*. This is a unique institutional arrangement in NSW and has had some significant implications for weed management.

The region encompasses one of the most diverse rangeland areas of Australia, comprised of arid and semi-arid land, mostly unsuitable for intense agriculture due to unreliable rainfall and constraints such as soil type. Drought is a common part of the climatic cycle in the Western region.

Rainfall is low and highly variable in the Western region. Annual average rainfall ranges from 412 millimetres at Brewarrina, 324 millimetres at Balranald, to 260 millimetres at Broken Hill. It is a predominantly flat area that is interrupted by stony ridges and ranges.



23.3M ha

Agricultural land occupies 23.3 million hectares where 51% grow sheep for wool, 49% grow sheep for meat, 33% grow cattle, 27% harvest goats and 6% grow crops.



6,630

Nearly all the land in the Western region is held under Western Lands Leases, currently equating to 6,630 leases.



40%

The Western region is the largest Local Land Services region in NSW, covering 314,500 km², or 40% of the state.

The region is bisected by the Barwon-Darling River system, which runs for approx 2,000 km south-west via a mostly confined series of channels and wetlands. The headwaters for this system originate in Queensland, increasing the risk of new incursions. The region is also bounded by the Murray, Murrumbidgee and Lachlan rivers in the south and includes more than sixty wetlands of national significance and three wetland areas of international significance. Major water storages include The Great Artesian Basin, Menindee Lakes and Lake Victoria. Approximately 95 per cent of the region remains uncleared; however much of the vegetation has been modified to some degree due to the impacts of total grazing pressure and changed fire regimes.

The region is home to rare and threatened wildlife, flora species and vegetation communities that are recognised under NSW and Australian Government legislation.

The Western region is steeped in Aboriginal history, culture and spiritual significance. There are a number of culturally significant and protected conservation sites including Mungo National Park (within the Willandra Lakes World Heritage Area), the Menindee Lake system and Mutawintji National Park (also a declared wilderness), the heritage listed Brewarrina Fish Traps (Baiame's Ngunnhu) and nearly 20 declared Aboriginal Places under the *National Parks and Wildlife Act 1974*.

Soil profiles vary considerably within the region, with sandy soil types predominating the north-western parts, trending towards loams the further one moves east. Clay soils are strongly associated with the rivers and floodplains of the region.

The Western region is estimated to generate in excess of \$1 billion in earnings per annum, predominantly from agriculture, mining and tourism. The primary land uses within the Western region include extensive rangeland grazing on native pastures, dryland agriculture, irrigated pastures and horticulture. Food and fibre production include wool, cereal grains, oilseeds, cotton, lamb, mutton, beef, citrus, dairy products, rice, grapes, vegetables, almonds, and goat and kangaroo meat.

Primary production from the Western region generated an estimated \$673 million in 2019-20, excluding the goat industry with an estimated value of \$68 million in 2018-2019.

The average property size is 15,000 hectares, Some Pastoral properties in the far west of the region can be up to 200,000 hectares (2,000 km²) in size.

A large and growing tourism industry is strongly associated with these areas and is an important part of the regional economy. Mining is a major contributor to the regional economy but occupies a relatively small area of land, being mostly restricted to areas adjacent to Broken Hill and Cobar.

4.2 Key risks to the region

Given its history, size and diversity of land uses and natural environments, the Western region has several natural resource management issues that are of concern to land managers and the general community. Many of the issues are inter-related.

The potential impact of invading plants in the Western region is greatest on large areas of grazing land, rangeland, broad acre cropping areas, roadsides, wetlands and waterways. Weeds can reduce agricultural productivity, impact on biodiversity and function of natural areas and ecosystems, reduce soil stability and water quality, affect livestock health, and degrade public amenities and infrastructure. These impacts are perpetuated by the following:

- Uncontrolled total grazing pressure – Domestic livestock, native and feral animals contribute to landscape degradation and offer opportunity for exotic weeds to proliferate across the region.
- Incursion of new weeds – New weed incursions are a high risk across a huge, sparsely populated area with numerous corridors to spread through. Pathways such as roads, railway corridors, travelling stock routes, and rivers pose the greatest risk.
- Aquatic environments – The region includes some of the state's major river systems, totalling about 3,500 km of rivers and lake frontages, bounded by the Murray and Murrumbidgee rivers to the south, Lachlan River to the south-east, and the Barwon – Darling (Barka) Rivers to the north, which are a key pathway for weed incursions.
- Climate change - With climate change the possibility of new weed species establishing in the region increases, and with this increased risk higher vigilance is needed to intercept new incursions.



4.3 Priority weeds in the Western region

Regional weed assessment and prioritisation process

Application of the NSW weed risk management system provides the management categories and objectives, and the outcomes to demonstrate compliance with the general biosecurity duty developed for the region. The management categories used in the assessment are summarised in Table 4.1.

Table 4.1: Defining regional weed management categories.

Management category	Objective	Characteristics of weeds in this category
Prevention	To prevent the weed species arriving and establishing in the region.	Weeds currently not found in the region, that pose a significant biosecurity risk and prevention of the biosecurity risk posed by these weeds is a reasonably practicable objective.
Eradication	To permanently remove the species and its propagules from the region OR to destroy infestations to reduce the extent of the weed in the region with the aim of local eradication.	Weeds are present in limited abundance in the region. Elimination of the biosecurity risk posed by these weeds is a reasonably practicable objective.
Containment	To prevent the ongoing spread of the species in all or part of the region.	These weeds are widely distributed in parts of the region. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.
Asset protection	To prevent the spread of weeds to key sites/assets of high economic, environmental and social value, or to reduce their impact on these sites if spread has already occurred.	These weeds are widely distributed in some areas of the region. Their spread should be minimised to protect priority regional assets.

Regional priority weeds have been assessed by regional weed committees as posing a high risk to specific regions of NSW. Western regional priority weeds are identified in Table 4.2 with additional further information available in [Appendix 1.2](#) of the Plan.

Regional priority weeds are regulated through the general biosecurity duty and each weed has a management category. Regional recommended measures are listed for each weed and communicate how landholders and stakeholders in the region should discharge their general biosecurity duty for that weed. Weeds are grouped by regional management category (see Table 4.1).

There are a number of weeds assessed as having a high or very high weed risk (invasiveness, impacts and potential distribution) but where the feasibility of coordinated control (control costs, persistence, current distribution) at the regional level is considered negligible or low given these weeds are already found to be widespread across the region. A list of these weeds is provided in [Appendix 2](#).

Table 4.2: Western region priority weeds.

Common name	Scientific name	Regional management priority
African boxthorn	<i>Lycium ferocissimum</i>	Asset Protection
Arrowhead/sagittaria	<i>Sagittaria calycina</i> var. <i>calycina</i> <i>Sagittaria playtphylla</i>	Prevention
Boxing glove/coral cactus	<i>Cylindropuntia fulgida</i> var. <i>mamillata</i>	Eradication
Bridal creeper	<i>Asparagus asparagoides</i>	Asset Protection
Burr ragweed	<i>Ambrosia confertiflora</i>	Eradication
Clock weed	<i>Oenothera curtiflora</i>	Eradication
Coolatai grass	<i>Hyparrhenia hirta</i>	Prevention
Devil's rope	<i>Cylindropuntia imbricata</i>	Asset Protection
Giant reed	<i>Arundo donax</i>	Containment
Harrisia cactus	<i>Harrisia</i> spp.	Asset Protection
Hudson pear	<i>Cylindropuntia pallida</i>	Eradication
Mesquite	<i>Prosopis</i> spp.	Containment
Mother of millions	<i>Bryophyllum</i> spp. and hybrids	Containment
Prickly pears	<i>Opuntia</i> spp.	Asset Protection
Prickly pears	<i>Cylindropuntia</i> spp.	Asset Protection
Silver-leaf nightshade	<i>Solanum elaeagnifolium</i>	Asset Protection
Spiny burrgrass	<i>Cenchrus longispinus</i> , <i>Cenchrus spinifex</i> (syn. <i>C. incertus</i>)	Asset Protection
Water lettuce	<i>Pistia stratiotes</i>	Prevention
Willow rhus	<i>Searsia lancea</i>	Eradication

4.4 Community involvement

For this Plan to succeed it is essential that all programs and related activities continue to be based on partnerships and collaboration with a wide range of landholders, community members, and government stakeholders.

The following points reference the engagement strategies utilised to ensure collaboration and participation with community in weed management:

- Developing projects in collaboration with stakeholders and community representatives to actively manage priority weeds.
- Engagement with influential organisations such as Landcare, rural industry and producer groups, Aboriginal community, non-government organisations, environmental businesses and conservation groups.
- Representation on the Regional Weeds Committee covers a wide range of stakeholder organisations and groups to ensure a collaborative approach to weed management across the region.
- Community based awareness raising, and engagement is tailored to ensure best dissemination of information and education across the target audience. This is usually in the form of local and regional community events, awareness raising and training opportunities, workshops and information sessions.
- Members of Western Local Land Services and the Western Regional Weed Committee play an important role in communicating the strategy of the Committee across all parts of the Region, and cover most representative areas, groups and community affected by weeds.
- Specific input on weed management through the Aboriginal Community Advisory Group, NRM and Agriculture Community Advisory Group and Western Board.
- Engagement of all tenure holders including private and public land managers. Communities and stakeholders are engaged and motivated to undertake their general biosecurity duty responsibilities.
- Implement a communications strategy that delivers clear and consistent messages to a wide range of internal and external stakeholders in relation to weed management. This will include the development of publications and other media to reach audience, and larger scale media products and information for specific weed campaigns.



5. Implementing regional key deliverables

5.1 Overview

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

This section covers actions required to achieve the goals of the regional plans which have been directly taken from the NSW Invasive Species Plan.

The Plan sits as an enabling plan under the Local Land Services Western Local Strategic Plan and will be implemented in collaboration with key stakeholders, the community and Western Local Land Services. Collaboration and building capacity of landholders is central to plan implementation.

Goal 1:

Exclude – prevent the establishment of new invasive species.

Goal 2:

Eradicate or contain – eliminate, or prevent the spread of new invasive species.

Goal 3:

Effectively manage – reduce the impacts of widespread invasive species.

Goal 4:

Capacity building – ensure NSW has the ability and commitment to manage invasive species.

5.2 Implementation principles

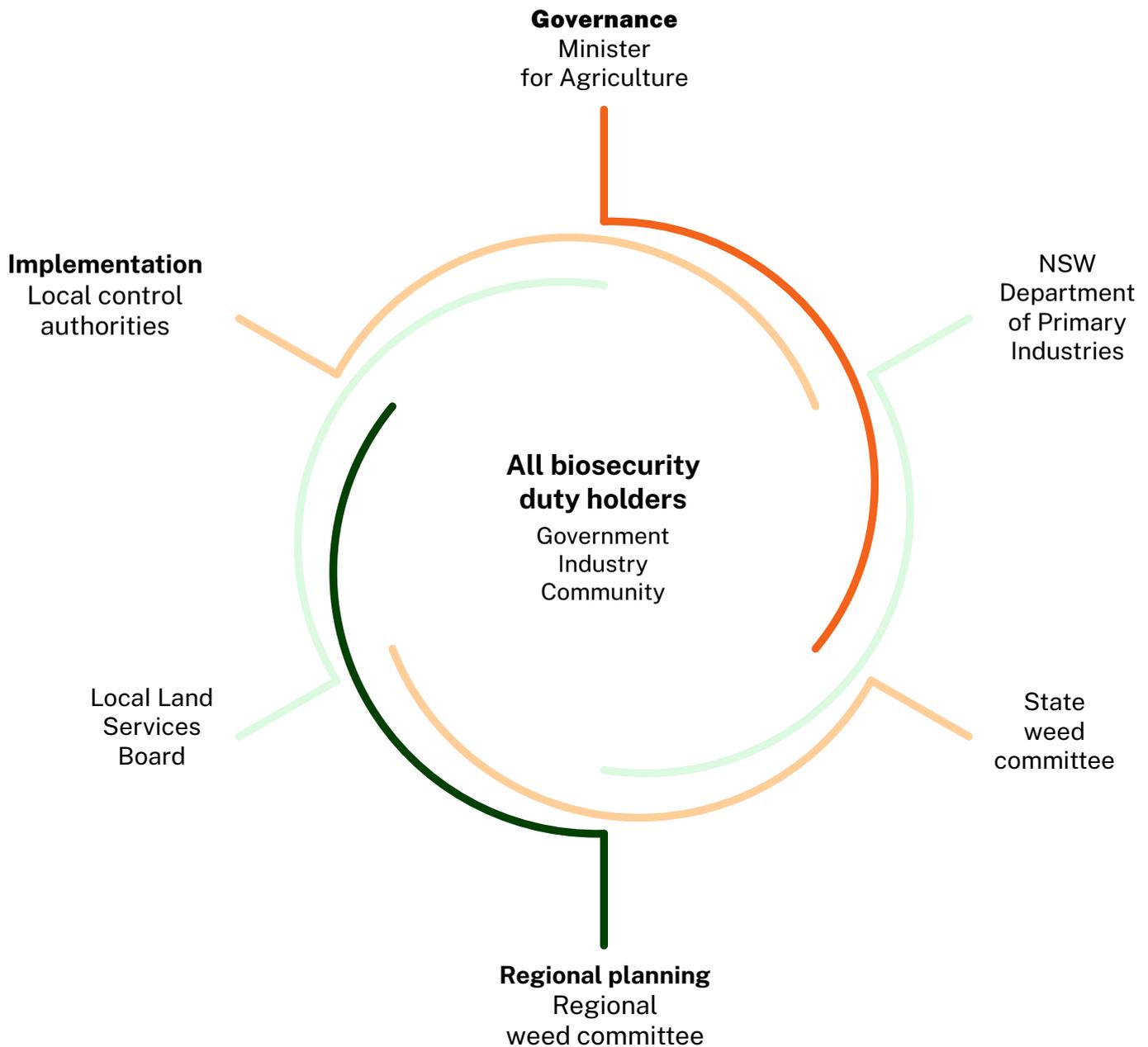
The following principles will be used to guide weed management planning and implementation.

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

5.3 Roles and responsibilities for implementation of the Plan

The following diagram (Figure 5.1) outlines the governance and management role of the state and government organisations collective responsibilities in the development of the Regional Strategic Weed Management Plans, and the implementation roles of stakeholders, the state and local governments in the delivery of the Plan.

Figure 5.1: Roles in weed management.



Landholders (owners and/or occupiers)

All public and private landholders have an important role in the management of weeds in the region, including the development and implementation of management strategies to address the key deliverables.

All public and private landholders are required to know what weeds are or could impact land under their care and control and have reasonable measures in place to mitigate this risk.

Landholders should support implementation of the regional key deliverables by setting a high standard of best practice weed management and collaborating with adjacent landholders to effect tenure neutral weed management.

Local government

Local government supports implementation of the regional key deliverables by:

- engaging local communities, managing public lands and assisting with emergency management.

Local government also makes a significant investment in local and regional weed management.

Local control authorities

Local control authorities, support implementation of the regional key deliverables by:

- enforcing legislated weed management obligations on private and public land
- delivering components of the NSW Weeds Action Program throughout the state
- conducting weed inspections on private and public land
- controlling weeds on lands managed by local government
- reporting and mapping weed incidence across the state
- input into weed strategy and policy
- providing education, training and resources for both the public and for staff.

State government

The NSW Department of Primary Industries is the lead agency for weed management within the NSW Government.

Local Land Services is responsible for coordinating and facilitating weed management at a regional level, through the implementation of regional sub-programs.

NSW Department of Primary Industries

The NSW Department of Primary Industries supports implementation of the regional key deliverables by:

- managing updates and amendments to the NSW *Biosecurity Act 2015*
- leading and administering the NSW Weeds Action Program
- managing the NSW Weeds Information Database, which provides information about over 300 weeds for the [NSW WeedWise website](#) and app
- managing the weeds extranet, which facilitates information and resource sharing for weeds professionals in NSW and interstate
- providing extension, education and training services
- leading the response to new incursions of state priority weeds and nationally significant weeds
- developing non-regulatory approaches and incentives
- conducting weeds research and collaborating with other researchers
- providing biological control services
- capturing state-wide weeds data through the Biosecurity Information System – Weeds
- resourcing the NSW Department of Primary Industries biosecurity helpline (1800 680 244)
- developing policies and guidelines to support the work of the State Weed Committee.

Local Land Services

Local Land Services support implementation of the regional key deliverables by:

- delivering regional strategic weed management plans
- facilitating and coordinating regional strategic planning
- assisting with education and community outreach programs
- controlling weeds on lands under their control.

Local Land Services are responsible for managing the Travelling Stock Reserve network, and therefore must exercise all Landholder responsibilities.

5.4 Regional deliverables

Delivery partners define key regional deliverables and develop and implement processes to address actions. It is recognised that different stakeholders are resourced at different levels and have different priorities in weed management. Consistent collaborative approach for long term weed management is required by all stakeholders.

Investment by all landholders and stakeholders in weed management should align with the goals of the NSW Invasive Species Plan and regional priority weeds.

The below table outlines relevant deliverables that relate to the NSW Invasive Species Plan that are a priority for the Western region. State deliverables are included in the [NSW Invasive Species Plan](#).

Table 5.1: Relevant regional deliverables that relate to the NSW Invasive Species Plan.

GOAL 1 - Exclude: prevent the establishment of new invasive species				
Outcomes	Strategies	Key deliverables	Responsibility	Timeframe
1.1 Improved identification and management of high-risk species and pathways	1.1.1 Develop species and pathway risk assessment frameworks that are consistent with national approaches where appropriate	Conduct an annual review of the Western local inspection and high-risk pathway management plans for all high-risk species (1 review)	Local control authorities Western Local Land Services	Annually
	1.1.2 Review legislative arrangements for control of high-risk species and pathways	Review regional High Risk Pathways Plan and Rapid Response Plan (2 plans) Develop and review a Regional High Risk Weeds Inspection Plan (1 plan)	Western Local Land Services Regional weed committee Local control authorities	Annually Review at Year 5

GOAL 1 - Exclude: prevent the establishment of new invasive species

Outcomes	Strategies	Key deliverables	Responsibility	Timeframe
1.1 Improved identification and management of high-risk species and pathways	1.1.3 Implement legislation, education and enforcement programs for effective management of high-risk species and pathways	Annual work plans developed by local control authorities (8 plans)	Local control authorities	Annually
		Support a regional inspection program for high-risk sites and pathways and tenure-neutral public and private land inspections	Western Local Land Services	Annually
		Provide engagement material on weed identification (2 resources)	Western Local Land Services	Annually
		Implement the Weeds Engagement Strategy to remind landholders of biosecurity duty	Western Local Land Services	Annually
	1.1.4 Work with industry to mitigate risk, including codes of practice and labelling standards	Promote machinery hygienic practices through toolbox meetings (16 toolbox meetings)	Local control authorities	Annually

GOAL 1 - Exclude: prevent the establishment of new invasive species

Outcomes	Strategies	Key deliverables	Responsibility	Timeframe
1.2 Improved early detection capabilities	1.2.1 Continually review and improve early detection capabilities	Continue to develop reporting and monitoring technologies to enhance early detection capabilities	Western Local Land Services	Annually
		Undertake regular surveillance and monitoring to identify biosecurity risks by utilising new technologies like drone mapping and use of WeedScan when released for public use	Local control authorities	Annually
		Complete an annual review of regional high-risk weed species listed in the Regional Strategic Weed Management Plan 2023-2027 (1 meeting)	Local control authorities Western Local Land Services Western Regional Weed Committee	Annually
		Authorised officers to attend workshops and training to improve skills and implement improved technologies e.g., drones. (1 event)	Local control authorities	By Years 3 and 5
	1.2.2 Undertake regular fore-sighting to identify and address emerging trends that could lead to increased biosecurity risks	Identify and address emerging biosecurity risk trends during Western Regional Weeds Committee meetings, State-wide task force, and conferences/forums. (1 meeting / event)	Western Local Land Services	Year 3 and Year 5
		Attend local toolbox meetings with landholder groups and mining companies and liaise closely with Landcare to keep abreast of local weed issues/trends (2 meetings)	Western Local Land Services	Annually
Review weed risk assessments of priority weeds (20 species)		Local control authorities Western Local Land Services Western Regional Weed Committee	Year 3 and Year 5	

GOAL 1 - Exclude: prevent the establishment of new invasive species

Outcomes	Strategies	Key deliverables	Responsibility	Timeframe	
1.2 Improved early detection capabilities	1.2.3 Improve capacity (people, equipment and processes) to identify and report suspected new invasive species	Support authorised officers attendance at relevant training, conferences, forums, and events. (1 event)	Western Local Land Services Local control authorities	Annually	
		Provide a range of information, resources and training to improve identification skills, surveillance, knowledge, and adoption of best practice weed control methods (2 resources /events)	Western Local Land Services Local control authorities	Annually	
		Utilise traditional media and social media as outlined in the weeds engagement strategy (2 media products)	Local control authorities Western Local Land Services	Annually	
		Implement and review the weeds engagement strategy (1 plan)	Western Local Land Services Local control authorities Western Regional Weed Committee	Review Year 3 and Year 5	
	1.2.4 Increase public awareness of incursion risk and reporting mechanisms		Inform land managers of their obligations under the <i>Biosecurity Act 2015</i> by providing printed material, and web-based resources (2 resources)	Western Local Land Services	Annually
			Deliver education, training, and technical support, including workshops/ events, to enhance community-wide knowledge of general biosecurity duty, and promote use of citizen science platforms and other relevant online reporting tools (2 events)	Local control authorities	Annually

GOAL 2 - Eradicate or contain: Eliminate or prevent the spread of invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
2.1 Improved rapid response capabilities to eradicate or contain new incursions	2.1.1 Develop more structured processes to respond to invasive species reports	Provide training opportunities for local control authority staff to workshop responses to invasive species incursions (1 event)	Western Local Land Services	Annually
	2.1.2 Develop incursion response plans for extreme risk species	Annual review of the Western Rapid Response Plan to ensure best practice response to state priority weeds (1 review)	Western Local Land Services Local control authorities	Annually
		Implement rapid response plan through reinspection, containment and control	Local control authorities	Annually
		Implement regional inspection plan through reinspection of private properties	Local control authorities	Annually
		Develop and implement weed management plans for high-risk species for private properties.	Local control authorities	Annually
	2.1.3 Develop rapid response plans and cost-sharing agreements	Develop and implement weed management plans for regional priority species	Local control authorities	Annually
		Develop a Memorandum of Understanding with local control authorities to ensure Local Land Services can support them to achieve their weed management responsibilities (3 MoUs)	Local control authorities	Annually
	2.1.5 Maintain a sufficient state-wide network of biosecurity staff to respond to incursions	Review rapid response plan for high-risk weed incursions and disseminate to local control authorities (1 plan)	Western Local Land Services	Annually
Support and maintain regional weed officer and agency network across all local control authorities through attendance at regional weed committee meetings and ongoing stakeholder capacity building (3 meetings)		Local control authorities Western Local Land Services	Annually	

GOAL 3 - Effectively manage: reduce the impacts of widespread invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
3.1 Management programs prioritised to give more targeted effort and greater benefit	3.1.1 Prioritise invasive species management at the regional level through regional pest animal and weed management strategies	Development and review of the Western Regional Strategic Weed Management Plan (1 Regional Strategic Weed Management Plan)	Western Local Land Services Local control authorities Regional weed committee	Year 3 and Year 5
	3.1.2 Prioritise management efforts based on current and potential impacts	Identify and target priority areas in Endangered Ecological Communities and threatened species habitat (1 priority mapping)	Western Local Land Service	Year 2-4
		Continue to map the extent of mesquite and other priority species in the Western Region, seeking to apply control measures to limit spread until an effective management solution presents	Local control authorities	By year 5
		Deliver regionally appropriate on-ground and education programs, specifically focussed on weed management (1 program)	Western Local Land Services	Annually
		Gain a better understanding of the impacts of a changing climate on weed species behaviour, and the interplay between natural systems and weeds (1 report)	Western Local Land Services	By year 3
	3.1.3 Programs are measured with clear benchmarks to ensure results are quantified	Deliverables are reported into the weeds information database (WIDX) (1 report)	Western Local Land Services	Annually

GOAL 3 - Effectively manage: reduce the impacts of widespread invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
3.2 Improved management effectiveness	3.2.2 Encourage co-operative programs that use integrated management across all tenures	Partner with local control authorities, community groups, state and private land managers to develop and implement regional on-ground weed management project. (1 project -other than Weed Action Program)	Western Local Land Services	Annually
		Seek to develop weed management programs at a landscape level, crossing tenures, and seeking a cooperative approach from all stakeholders	Western Local Land Services Local control authorities	Annually
	3.2.4 Large management programs should have monitoring, reporting and feedback processes in place to allow continual refinement of management approach	Develop and review a regional monitoring, evaluation, reporting and improvement (MERI) plan for weed programs (1 MERI Plan)	Western Local Land Services	Annually
			Implement MERI plan to monitor and report on program effectiveness (1 report)	Western Local Land Services
		Local control authorities to provide quarterly reports to regional weeds coordinator on the progress of NSW Weeds Action Program deliverables (4 reports)	Local control authorities	Annually

GOAL 4 - Capacity building: Ensure NSW has the ability and commitment to manage invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
4.1 Roles and responsibilities are clear for weeds management	4.1.1 Ensure roles and responsibilities for each stakeholder are clearly defined and understood	Employ 1 FTE regional weeds coordinator to implement and monitor the NSW Weeds Action Program for the Western region sub-program	Western Local Land Services	Annually
		Coordinate and support regional weed committee meetings (3 regional weed committee meetings)	Western Local Land Services	Annually
		Local control authorities are acknowledged as the primary agency for inspection, compliance, and engagement within the NSW Weeds Action Program 2020-2025 (8 weed management agreements)	Local control authorities	Annually
		Regional weed committee has roles and responsibilities of all members defined through a review of the regional weeds committee terms of reference (1 terms of reference)	Western Regional Weed Committee Western Local Land Services	Annually
4.2 Private landholders and the general community are motivated to support biosecurity at all stages of invasion curve	4.2.1 Inform stakeholders of their obligations under the <i>Biosecurity Act 2015</i>	Implement weeds engagement strategy (1 plan)	Western Local Land Services Local control authorities	Annually
		Deliver consent, compliance and enforcement activities that educate landholders on their general biosecurity obligations and protect Western communities and industries from biosecurity risks	Western Local Land Services	As required

GOAL 4 - Capacity building: Ensure NSW has the ability and commitment to manage invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe	
4.2 Private landholders and the general community are motivated to support biosecurity at all stages of invasion curve	4.2.2 Identify opportunities for community involvement in biosecurity	Maintain/review a regional contact/ stakeholder data base (1 contact database)	Western Local Land Services	Annually	
		Implement the Western Regional Weed Program Community Engagement Plan by attending field days and public opportunities to provide information (1 event)	Local control authorities	Annually	
		Engage with Landcare groups and community groups to build capacity and provide information on weed management (2 meetings/events)	Western Local Land Services Local control authorities	Annually	
	4.2.3 Maintain and build on existing volunteer networks	Work with a range of community groups, such as Landcare groups, to deliver programs that assist them to manage and restore their local environment and improve the sustainability of agricultural activities (1 program)	Work with a range of Aboriginal community groups and individuals to improve weed management across the region and on Aboriginal managed land (200 hectares)	Western Local Land Services Local control authorities	Annually
			Work with a range of Aboriginal community groups and individuals to improve weed management across the region and on Aboriginal managed land (200 hectares)	Western Local Land Services	In years 2 to 5
	4.2.4 Provide a range of information, education and training resources	Implement the regional community engagement Plan. Deliver education, training, and technical support, including attending workshops/ events/trade days, to enhance community-wide knowledge of general biosecurity duty (1 event)	Western Local Land Services	Annually	
Local control authorities			Annually		

GOAL 4 - Capacity building: Ensure NSW has the ability and commitment to manage invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
4.2 Private landholders and the general community are motivated to support biosecurity at all stages of invasion curve	4.2.5 Raise awareness of the importance of reporting new incursions and provide accessible mechanisms for reporting	Build community and local control authority capacity to encourage wider use of purpose-built systems, to improve reporting of pest and disease distribution, impact and information management, such as WeedScan (when available) (1 event)	Western Local Land Services	Annually
4.3 Skilled workforce implementing invasive species management	4.3.1 Maintain availability of competency-based education and training courses	Support Western Local Land Services Biosecurity staff to undertake appropriate weeds training and attend regional planning activities (2 events)	Western Local Land Services	Annually
		Encourage local control authorities to support their weeds officers to attend training opportunities and regional planning activities (2 events)	Western Local Land Services	Annually
	4.3.2 Maintain an adequate network of biosecurity professionals across the state that can be rapidly deployed to manage biosecurity emergencies	Implement Western Local Land Services' roles and responsibilities for biosecurity management, identified in the NSW biosecurity guidelines (NSW Biosecurity Strategy 2021)	Western Local Land Services	Annually
		Ensure 100% of Local Land Services biosecurity staff are adequately trained in emergency management and ensure qualifications are current/valid (1 training event)	Western Local Land Services	Annually
		All local control authorities have authorised officers working for them appointed under the Act	Local control authorities	As required
		Encourage authorised officers are upskilled and that there are contingency plans in place for retiring weed officers	Local control authorities	As required

GOAL 4 - Capacity building: Ensure NSW has the ability and commitment to manage invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
4.4 Improved tools to monitor and manage invasive species	4.4.1 Maintain research capacity and links with relevant national and international research organisations	Partner with key stakeholders, industry, Biocontrol Task Force and CSIRO on research and development projects and initiatives	Western Local Land Services	As opportunities arise
	4.4.2 Identify research priorities and potential funding sources	Seek new opportunities, partnerships and funding for landscape-scale weed management through community-based organisations, government agencies/ departments (e.g., CSIRO, Environmental Trust) or private enterprise, such as chemical companies	Western Local Land Services Regional weed committee	As opportunities arise
	4.4.3 Develop and promote an information management system to improve capacity to understand and deal with biosecurity threats	Promote and train weed officers in the use of the Western Weeds App for all inspection, control, engagement and compliance activities (1 training event) Promote the WeedScan App when it becomes available	Western Local Land Services Regional weed committee Local control authorities Western Local Land Services Local control authorities	Annually When available

GOAL 4 - Capacity building: Ensure NSW has the ability and commitment to manage invasive species

Outcomes	Strategies	Key Deliverables	Responsibility	Timeframe
4.5 Legislation and policy supports effective action at all stages of invasion curve	4.5.3 Maintain involvement in national processes, committees and agreements to facilitate more consistent invasive species management approaches nationally	Ensure the Western Regional Weeds Committee has cross-region representatives who can provide support and input to the Committee and Western Regional Strategic Weed Management Plan	Local control authorities Western Local Land Services Western Regional Weed Committee	Annually
		Engage and partner with neighbouring Local Land Services regions and interstate counterparts on joint weed management whenever possible (3 partnerships)	Local control authorities Western Local Land Services Western Regional Weed Committee Adjoining Local Land Services regions	Annually
		Western Local Land Services representatives attend wider committees and working groups (1 event)	Western Local Land Services	Annually
		Facilitate strategic release of bio-control agents if available	Western Local Land Services	When available

Collaborative research and practical application

Regional Weed Committees will investigate opportunities for collaboration that may include:

- engagement with weed science researchers, community, the aboriginal community, government, and industry to identify current knowledge gaps and to document weed species research priorities
- strengthening partnerships and actively participating in industry, government and university collaboration for weeds research
- maintaining currency of regional and local weed risk assessments
- development of new technologies and innovative approaches to the management of weed risks
- application of biological control programs for priority weeds
- incorporation of research findings into weed management decision-making (this is part of adaptive management).



6. Measuring success and continuous improvement

This section covers how we intend to address and document to what extent goals have been achieved, as well as evaluating performance, and reviewing our activity and focus.

6.1 Measuring performance

A state level monitoring, evaluation, reporting and improvement (MERI) framework for Regional Strategic Weed Management Plans, has been developed to guide Regional Weeds Committees to measure their success and continuous improvement.

Each Regional Weeds Committee will establish a MERI framework for Regional Strategic Weed Management Plans. This MERI framework will facilitate the review of results against planned immediate, intermediate and long-term outcomes.

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

All stakeholders and member organisations of the regional weed committees are expected to assist with data collections and sharing for the purposes of MERI.

6.2 Performance indicators and reporting

Standardised MERI systems are used to compile and report on the efforts and achievements of stakeholders in contributing to this plan. A [state-wide MERI framework](#) has been developed for annual performance measurement.

Regional weed committees may undertake a more extensive review annually or through the life of the plan.

Performance indicators will be developed against the actions and strategies in section 5, to enable tracking of the progressive impacts of interventions and investment in priorities and will relate to the goals for this plan.

6.3 Plan review

The Western Regional Weed Committee will foster adaptive management and continual improvement in weed management.

A mid-term review of this plan will be undertaken at year three (2025) and a full review will be undertaken nearing the end of the five-year term for this plan (2027).

Weed risk assessments will be updated as needed from time to time and a particular focus at year three will be on evaluation and review of weeds listed in this plan ([Appendix 1](#) and [Appendix 2](#)).

7. List of Acronyms

DPI	Department of Primary Industries	TSR	Travelling stock reserve
MERI	Monitoring, evaluation, reporting and improvement		

8. Glossary

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

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

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

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

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

Landholders: means a person who is the owner of land or who, whether by reason of ownership or otherwise, is in lawful occupation or possession, or has lawful management or control, of land.

Stakeholders: Organisations that collaborate and partner with Local Land Services directly to support customer service delivery, including community and industry groups, not-for-profits, non-government organisations, Landcare, research institutions, state and local government and private sector providers.

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

Weed Action Program: The New South Wales (NSW) Weeds Action Program is a NSW Government initiative to reduce the impact of weeds through implementation of the NSW Invasive Species Plan and the NSW Biosecurity Strategy.

9. References

McLeod, R. (2018). Annual Costs of Weeds in Australia. Retrieved from <https://invasives.com.au/wp-content/uploads/2019/01/Cost-of-weeds-report.pdf>

Appendices

Appendix 1: Priority weeds for the Western Local Land Services region

This appendix identifies state priority weed species (A1.1) as set by NSW Department of Primary Industries and regionally determined priorities (A1.2) as determined by the Western Regional Weed Committee.

The *Biosecurity Act 2015* and Biosecurity Regulation 2017 provide specific legal requirements for state priority weeds (A1.1) and high-risk activities. For each state priority weed, the management priority, and specific requirements for its management (as stated in the *Biosecurity Act 2015* and regulations) is included. State priority weeds are regulated as prohibited matter, or under biosecurity zones, or control orders, or have mandatory measures that apply.

A1.2 identifies regionally prioritised weeds and the outcomes that demonstrate compliance with the general biosecurity duty. Recommended measures for these weeds are provided in the NSW Department of Primary Industries website and mobile based application [NSW WeedWise](#), as practical advice on achieving these outcomes.

A1.1 State priority weeds

State priority weed category – PREVENTION:

The following weeds have not established self-sustaining populations in NSW and pose a significant biosecurity risk to the state. Prohibiting these weeds from the state to prevent the biosecurity risk posed is a reasonably practical objective.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
All species of vascular plant Tracheophyta	<i>Tracheophyta</i>	<p>Mandatory Measure (Division 8, Clause 34)</p> <p>Duty to notify on importation of plants into the state:</p> <p>(1) A person must not import into the State a species of vascular plant (Tracheophyta) if the species is not currently present in the State unless the person has, at least 20 working days before the plant is imported into the state, notified the species of plant and its proposed location within the State.</p> <p>(2) The notification is to be given to the Secretary and is to be given in accordance with Part 6.</p> <p>(3) A species of plant is taken not to be present in the state if the National Herbarium of New South Wales does not show it as being present in the state.</p> <p>Note. See http://plantnet.rbgsyd.nsw.gov.au</p>

State priority weed category – PREVENTION:

The following weeds have not established self-sustaining populations in NSW and pose a significant biosecurity risk to the state. Prohibiting these weeds from the state to prevent the biosecurity risk posed is a reasonably practical objective.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Anchored water hyacinth	<i>Eichhornia azurea</i>	<p>Prohibited Matter (Part 4, Biosecurity Act, 2015)</p> <p>A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.</p> <p>A person has a biosecurity duty to ensure that so far as is reasonably practicable, the biosecurity risk posed by prohibited matter is prevented, eliminated or minimised.</p> <p>A person who becomes aware of, or suspects, that a prohibited matter event has occurred, is occurring or is about to occur has a biosecurity duty to immediately notify the local control authority about the prohibited matter event.</p> <p>Regional strategic response:</p> <ul style="list-style-type: none"> • Implement quarantine and/or hygiene protocols. • Undertake high risk sites and pathways analysis to identify potential introduction areas and preventative options. • Trigger rapid response protocol.
Black knapweed	<i>Centaurea x moncktonii</i>	
Bridal veil creeper	<i>Asparagus declinatus</i>	
Broomrape	Orobanche spp. (all species except the native <i>O. cernua</i> var. <i>australiana</i> and <i>O. minor</i>)	
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	
Frogbit / Spongeplant	<i>Limnobium</i> spp. (all species)	
Gamba grass	<i>Andropogon gayanus</i>	
Hawkweed	<i>Pilosella</i> spp (all species) in addition to <i>Hieracium</i> spp (all species except <i>Hieracium murorum</i>)	
Hydrocotyl/ Water pennywort	<i>Hydrocotyle ranunculoides</i>	
Karoo acacia	<i>Vachellia karroo</i> (syn. <i>Acacia karroo</i>)	
Kochia	<i>Bassia scoparia</i> (excluding subsp. <i>trichophylla</i>)	

State priority weed category – PREVENTION:

The following weeds have not established self-sustaining populations in NSW and pose a significant biosecurity risk to the state. Prohibiting these weeds from the state to prevent the biosecurity risk posed is a reasonably practical objective.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Koster's curse	<i>Clidemia hirta</i>	<p>Prohibited Matter (Part 4, Biosecurity Act, 2015)</p> <p>A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.</p> <p>A person has a biosecurity duty to ensure that so far as is reasonably practicable, the biosecurity risk posed by prohibited matter is prevented, eliminated or minimised.</p> <p>A person who becomes aware of, or suspects, that a prohibited matter event has occurred, is occurring or is about to occur has a biosecurity duty to immediately notify the local control authority about the prohibited matter event.</p> <p>Regional strategic response:</p> <ul style="list-style-type: none"> • Implement quarantine and/or hygiene protocols • Undertake high risk sites and pathways analysis to identify potential introduction areas and preventative options. • Trigger rapid response protocol.
Lagarosiphon	<i>Lagarosiphon major</i>	
Mexican feather grass	<i>Nassella tenuissima</i> (syn. <i>Stipa tenuissima</i>)	
Miconia	<i>Miconia</i> spp. (all species)	
Mikania vine	<i>Mikania micrantha</i>	
Mimosa	<i>Mimosa pigra</i>	
Pond apple	<i>Annona glabra</i>	
Prickly acacia	<i>Vachellia nilotica</i> (syn. <i>Acacia nilotica</i>)	
Rubber vine	<i>Cryptostegia grandiflora</i>	
Siam weed	<i>Chromolaena odorata</i>	
Spotted knapweed	<i>Centaurea stoebe</i> subsp. <i>australis</i>	
Water caltrop	<i>Trapa</i> spp. (all species)	
Water soldier	<i>Stratiotes aloides</i>	
Witchweed	<i>Striga</i> spp. (except the native <i>S. parviflora</i>)	
Yellow burrhead	<i>Limnocharis flava</i>	

State priority weed category – PREVENTION:

The following weeds have not established self-sustaining populations in NSW and pose a significant biosecurity risk to the state. Prohibiting these weeds from the state to prevent the biosecurity risk posed is a reasonably practical objective.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Parthenium weed	<i>Parthenium hysterophorus</i>	<p>Prohibited Matter (Part 4, Biosecurity Act, 2015)</p> <p>A person who deals with any biosecurity matter that is Prohibited Matter throughout the state is guilty of an offence.</p> <p>A person has a biosecurity duty to ensure that so far as is reasonably practicable, the biosecurity risk posed by prohibited matter is prevented, eliminated or minimised.</p> <p>A person who becomes aware of, or suspects, that a prohibited matter event has occurred, is occurring or is about to occur has a biosecurity duty to immediately notify the local control authority about the prohibited matter event.</p> <p>Mandatory Measure (Division 8, Clause 35, Biosecurity Regulation, 2017) - parthenium weed carriers – machinery and equipment</p> <p>(1) This clause applies to the following equipment:</p> <ol style="list-style-type: none"> a. grain harvesters (including the comb or front) b. comb trailers (including the comb or front) c. bins used for holding grain during harvest operations d. augers or similar equipment used for moving grain e. vehicles used for transporting grain harvesters f. vehicles used as support vehicles with grain harvesters and that have been driven in paddocks during harvest operations g. mineral exploration drilling rigs and vehicles used for transporting those rigs. <p>(2) A person must not import into the State from Queensland any equipment to which this clause applies.</p>

State priority weed category – ERADICATION:

The following weeds are present in limited distribution and abundance and pose a medium to high biosecurity risk to NSW. The measures established under the control orders are necessary to prevent, eliminate, minimise or manage the biosecurity risk or biosecurity impact.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Boneseed	<i>Chrysanthemoides monilifera</i> subspecies. <i>monilifera</i>	<p>The boneseed control zone is the whole of NSW</p> <p>The parkinsonia control zone is the whole of NSW</p> <p>The tropical soda apple control zone is the whole of NSW</p>
Parkinsonia	<i>Parkinsonia aculeata</i>	<p>Control measure - owners and occupiers of land</p> <p>(1) The owner or occupier of land in the control zone on which there is a new infestation of boneseed, parkinsonia or tropical soda apple must notify the local control authority for that land as soon as practicable of the following information:</p> <p>(a) the person's full name and contact details, including a telephone number</p> <p>(b) the address of the land, including the lot and deposited plan number and the property identification code for the land (if these are known)</p> <p>(c) any other information that is requested by the local control authority.</p> <p>(2) The owner or occupier of the land must ensure that the land is kept free of boneseed, parkinsonia or tropical soda apple by immediately destroying all boneseed, parkinsonia or tropical soda apple on the land. This requirement applies to any new infestation as well as any subsequent generations of boneseed, parkinsonia or tropical soda apple on that land.</p> <p>(3) The owner or occupier does not need to comply with subclause (1) if they know that notification of the new infestation on the land has already been given to the local control authority of that land.</p>
Tropical soda apple	<i>Solanum viarum</i>	<p>Control measure – persons dealing with carriers</p> <p>A person who deals with a carrier of boneseed, parkinsonia or tropical soda apple must take all reasonable steps to ensure that the carrier is not moved from the land with any boneseed, parkinsonia or tropical soda apple on it, attached to it, or contained in it, before the carrier is moved from the land.</p>

State priority weed category – ERADICATION:

The following weeds are present in limited distribution and abundance and pose a medium to high biosecurity risk to NSW. The measures established under the control orders are necessary to prevent, eliminate, minimise or manage the biosecurity risk or biosecurity impact.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Boneseed	<i>Chrysanthemoides monilifera</i> subspecies. <i>monilifera</i>	<p>Control measure – persons moving boneseed, parkinsonia or tropical soda apple and carriers of boneseed, parkinsonia or tropical soda apple</p> <p>(excluding a human)</p> <p>(1) A person who moves boneseed, parkinsonia or tropical soda apple or a carrier of boneseed, parkinsonia or tropical soda apple (excluding a human) to another property, must notify the local control authority for that other property as soon as practicable before moving the boneseed, parkinsonia or tropical soda apple of the following information:</p> <p>(a) the person’s full name and contact details</p> <p>(b) the addresses of the land the boneseed, parkinsonia or tropical soda apple is coming from and going to, including the lot and deposited plan number and the property identification code for the land (if these are known)</p> <p>(2) A person who moves boneseed, parkinsonia or tropical soda apple or a carrier of boneseed, parkinsonia or tropical soda apple (excluding a human) does not need to comply with subclause (1) if they know that notification of the movement has already been given to the local control authority for that other property.</p> <p>Note. Examples of when boneseed, parkinsonia or tropical soda apple or a carrier of boneseed, parkinsonia or tropical soda apple (excluding a human) may need to be moved include, but are not limited to, the movement of vehicles, soil, or livestock as well as movement for disposal.</p>
Parkinsonia	<i>Parkinsonia aculeata</i>	
Tropical soda apple	<i>Solanum viarum</i>	

State priority weed category – ERADICATION:

The following weeds are present in limited distribution and abundance and pose a medium to high biosecurity risk to NSW. The measures established under the control orders are necessary to prevent, eliminate, minimise or manage the biosecurity risk or biosecurity impact.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Chinese violet	<i>Asystasia gangetica</i> subspecies. <i>micrantha</i>	<p>Control order – (Chinese Violet Control Zone)</p> <p>1. Control measures for owners and occupiers of land</p> <p>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Chinese Violet Control Zone on which there is Chinese violet must:</p> <p>(a) notify the local control authority for the area if the Chinese violet is part of a new infestation of Chinese violet on the land:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the new infestation ii) verbally or in writing iii) giving the following: <ul style="list-style-type: none"> (1) the person’s full name and contact number (2) the location of the Chinese violet, including the property identification code for the land (if this is known) (3) any other information reasonably requested by the local control authority <p>(b) destroy all Chinese violet on the land, including fruit</p> <p>(c) ensure that subsequent generations of Chinese violet are destroyed</p> <p>(d) that the land is kept free of Chinese violet</p> <p>(e) The owner or occupier does not need to comply with (a) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p>

State priority weed category – ERADICATION:

The following weeds are present in limited distribution and abundance and pose a medium to high biosecurity risk to NSW. The measures established under the control orders are necessary to prevent, eliminate, minimise or manage the biosecurity risk or biosecurity impact.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Chinese violet	<i>Asystasia gangetica</i> subspecies. <i>micrantha</i>	<p>2. Control measures for persons dealing with carriers</p> <p>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Chinese violet in the Chinese Violet Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Chinese violet on the land or in or on the carrier, must:</p> <p>a) ensure that Chinese violet (including any seed and propagules) is not moved from the land</p> <p>b) immediately notify the local control authority for the area:</p> <ul style="list-style-type: none"> i) as soon as practicable after becoming aware of the presence of Chinese violet ii) verbally or in writing iii) giving the following: <ul style="list-style-type: none"> (1) the person's full name and contact number (2) the location of the Chinese violet, including the property identification code for the land (if this is known) iv) any other information reasonably requested by the local control authority. <p>c) The person who deals with a carrier of Chinese violet does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</p>

State priority weed category – ERADICATION AND/OR CONTAINMENT:

The following weeds pose a medium to high biosecurity risk to NSW and vary in distribution and abundance in different parts of the state. The principal object of a biosecurity zone regulation is to provide for the long term management of a biosecurity risk or biosecurity impact.

Species	Land area where requirements apply	Biosecurity Act requirements and strategic response in the region
Alligator weed <i>Alternanthera philoxeroides</i>	A biosecurity zone, to be known as the Alligator Weed Biosecurity Zone, is established for all land within the state except land in the following regions: <ul style="list-style-type: none"> a) Greater Sydney, b) Hunter (but only in respect of land in the local government area of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens). 	<p>Alligator Weed Biosecurity Zone (Biosecurity Regulation 2017 - Part 5, Division 2)</p> <p>An owner or occupier of land in the Alligator Weed Biosecurity Zone on which there is the weed <i>Alternanthera philoxeroides</i> (alligator weed) must:</p> <ul style="list-style-type: none"> (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6 (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed. <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)</p> <p>A person must not import into the state or sell.</p> <p>Regional strategic response:</p> <p>Implement Alligator Weed State Strategic Plan</p>
Bitou bush <i>Chrysanthemoides monilifera subsp. rotundata</i>	A biosecurity zone, to be known as the Bitou bush Biosecurity Zone, is established for all land within the state except land within 10 kilometres of the mean high water mark of the Pacific Ocean between Cape Byron in the north and Point Perpendicular in the south.	<p>Bitou Bush Biosecurity Zone (Biosecurity Regulation 2016 - Part 5, Division 3)</p> <p>An owner or occupier of land in the Bitou Bush Biosecurity Zone on which there is the weed <i>Chrysanthemoides monilifera subsp. rotundata</i> (bitou bush) must:</p> <ul style="list-style-type: none"> (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6 (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed. <p>Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)</p> <p>A person must not import into the state or sell.</p> <p>Regional strategic response:</p> <p>Implement Bitou Bush State Strategic Plan</p>

State priority weed category – ERADICATION AND/OR CONTAINMENT:

The following weeds pose a medium to high biosecurity risk to NSW and vary in distribution and abundance in different parts of the state. The principal object of a biosecurity zone regulation is to provide for the long term management of a biosecurity risk or biosecurity impact.

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

State priority weed category – CONTAINMENT AND/OR ASSET PROTECTION:

These weeds are widely distributed in some areas of the state. As Weeds of National Significance, their further spread through trade should be minimised to protect priority assets.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
African boxthorn	<i>Lycium ferocissimum</i>	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.
Asparagus weeds	<i>Asparagus aethiopicus</i> , <i>A. africanus</i> , <i>A. asparagoides</i> including the Western Cape form*, <i>A. densiflorus</i> , <i>A. plumosus</i> , and <i>A. scandens</i>	
Athel pine	<i>Tamarix aphylla</i>	
Bellyache bush	<i>Jatropha gossypifolia</i>	
Blackberry	<i>Rubus fruticosus</i> spp. agg. (except the varieties Chester Thornless, Dirksen Thornless, Loch Ness, Silvan, Black Satin, Murrindindi, Smooth Stem, Thornfree and Chehalem)	
Brooms	<i>Genista monspessulana</i> , <i>G. linifolia</i> , <i>Cystisus scoparius</i>	
Cabomba	<i>Cabomba caroliniana</i>	
Cat's claw creeper	<i>Dolichandra unguis-cati</i>	
Chilean needle grass	<i>Nassella neesiana</i>	

State priority weed category – CONTAINMENT AND/OR ASSET PROTECTION:

These weeds are widely distributed in some areas of the state. As Weeds of National Significance, their further spread through trade should be minimised to protect priority assets.

Common name	Scientific name	Biosecurity Act requirements and strategic response in the region
Fireweed	<i>Senecio madagascariensis</i>	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.
Gorse	<i>Ulex europaeus</i>	
Hymenachne	<i>Hymenachne amplexicaulis</i>	
Lantana	<i>Lantana camara</i>	
Madeira vine	<i>Anredera cordifolia</i>	
Mesquite	<i>Prosopis</i> spp.	
Prickly pears	<i>Opuntia</i> spp. (excluding <i>O. ficus-indica</i>), <i>Cylindropuntia</i> spp. and <i>Austrocylindropuntia</i> spp.	
Sagittaria	<i>Sagittaria platyphylla</i>	
Salvinia	<i>Salvinia molesta</i>	
Serrated tussock	<i>Nassella trichotoma</i>	
Silver-leaf nightshade	<i>Solanum elaeagnifolium</i>	
Willows	<i>Salix</i> species except <i>S. babylonica</i> , <i>S. X calodendron</i> and <i>S. x reichardtiji</i> (willows except weeping willows, pussy willow and sterile pussy willow)	

A1.2 Regional priority weeds

Regional priority weed category – PREVENTION (whole of region):

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

Coolatai grass - *Hyparrhenia hirta*

Water lettuce - *Pistia stratiotes*

Outcomes to demonstrate compliance with general biosecurity duty

Land managers should mitigate the risk of new weeds being introduced to their land

Land managers should eradicate the plant and keep the land free of the plant

A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant

Notify local control authority if found

Strategic response in the Western region

Implement quarantine and/or hygiene protocols

Undertake high risk sites and pathways analysis to identify potential introduction areas and preventative options

Have a collaborative rapid response protocol in place

Undertake development of a regional weed management strategy if required

Engagement programs and community awareness

Regional priority weed category – PREVENTION (whole of region):

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

Arrowhead - *Sagittaria calycina*

Sagittaria - *Sagittaria platyphylla*

Outcomes to demonstrate compliance with general biosecurity duty

Land managers should mitigate the risk of new weeds being introduced to their land

Land managers should eradicate the plant and keep the land free of the plant

A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant

Notify local control authority if found

Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell

Strategic response in the Western region

Implement quarantine and/or hygiene protocols

Undertake high risk sites and pathways analysis to identify potential introduction areas and preventative options

Have a collaborative rapid response protocol in place

Undertake development of a regional weed management strategy if required

Engagement programs and community awareness

Regional priority weed category – ERADICATION (whole of region):

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

Hudson pear - *Cylindropuntia pallida**

Boxing glove/coral cactus - *Cylindropuntia fulgida* var. *mamillata**

Burr ragweed - *Ambrosia confertiflora*

Clock weed - *Oenothera curtiflora*

Willow rhus - *Searsia lancea*

Outcomes to demonstrate compliance with general biosecurity duty

Land managers should mitigate the risk of new weeds being introduced to their land

Land managers should eradicate the plant and keep the land free of the plant

A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, keeping, moving, carrying, or releasing the plant

Notify local control authority if found

* Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell

Strategic response in the Western region

Implement quarantine and/or hygiene protocols

Surveillance and mapping to locate all infested properties

Monitor progress towards eradication

High level analysis of pathways to identify potential introduction areas and preventative options

Conduct awareness and engagement programs targeted at managers of high-risk sites

Undertake development of a regional weed management strategy if required

Engagement programs and community awareness

Regional priority weed category – 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.

Giant reed - *Arundo donax*

Land area where requirements apply	Outcomes to demonstrate compliance with general biosecurity duty	Strategic response in the Western region
<p>An exclusion zone is established for all lands in the Western Local Land Services region, except the core infestation area, which comprises all lands within the Wentworth Shire Council</p>	<p>Whole of region: Land managers mitigate the risk of the plant being introduced to their land</p> <p>Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant Notify local control authority if found</p> <p>Within core infestation: Land managers should mitigate the spread of the plant from their land A person should not buy, sell, move carry or release the plant into the environment Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value</p>	<p>Within exclusion zone: Implement quarantine and/or hygiene protocols Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives Monitor change in current distribution to ensure containment of spread High level analysis of pathways to identify potential introduction areas and preventative options Undertake development of a regional weed management strategy if required Engagement programs and community awareness</p> <p>Within core infestation area: Identification of key sites/ assets in the geographic area Identification of regional containment zones where required Develop region-wide coordinated campaigns for collaborative management Engagement programs and community awareness</p>

Regional priority weed category – 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.

Mesquite - *Prosopis* spp.

Land area where requirements apply	Outcomes to demonstrate compliance with general biosecurity duty	Strategic response in the Western region
<p>An exclusion zone is established for all lands in the Western Local Land Services region, except the core infestation area, which comprises all lands within the counties of Evelyn, Yantara, Mootwingee, Yancowinna, Menindee, Tandora, Livingstone and Windeyer</p>	<p>Whole of region: Land managers mitigate the risk of new weeds being introduced to their land</p> <p>Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant Notify local control authority if found</p> <p>Within core infestation: Land managers should mitigate spread of the plant from their land A person should not buy, sell, move, carry or release the plant into the environment Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell</p>	<p>Within exclusion zone: Implement quarantine and/or hygiene protocols Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives Monitor change in current distribution to ensure containment of spread High level analysis of pathways to identify potential introduction areas and preventative options Undertake development of a regional weed management strategy if required Engagement programs and community awareness</p> <p>Within core infestation area: Identification of key sites/ assets in the geographic area. Identification of regional containment zones where required Develop region-wide coordinated campaigns for collaborative management Engagement programs and community awareness</p>

Regional priority weed category – 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.

Mother of millions - *Bryophyllum* spp. and hybrids

Land area where requirements apply	Outcomes to demonstrate compliance with general biosecurity duty	Strategic response in the Western region
<p>An exclusion zone is established for the Western Local Land Services region. This does not include the core infestation area, which is defined as maintained gardens in the Western Local Land Services region</p>	<p>Whole of region: Land managers mitigate the risk of new weeds being introduced to their land</p> <p>Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant Notify local control authority if found</p> <p>Within core infestation: A person should not buy, sell, move, carry or release the plant into the environment Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value</p>	<p>Within exclusion zone: Implement quarantine and/or hygiene protocols Surveillance and mapping to locate all infested properties and maintain currency of exclusion zone and objectives Monitor change in current distribution to ensure containment of spread High level analysis of pathways to identify potential introduction areas and preventative options Undertake development of a regional weed management strategy if required Engagement programs and community awareness</p> <p>Within core infestation area: Identification of key sites/ assets in the geographic area. Identification of regional containment zones where required Develop region-wide coordinated campaigns for collaborative management Engagement programs and community awareness</p>

Regional priority weed category – ASSET PROTECTION:

These weeds are widely distributed in some areas of the region. Their spread should be minimised to protect priority assets

<p>African boxthorn - <i>Lycium ferocissimum</i> Bridal creeper - <i>Asparagus asparagoides</i> Devil's rope - <i>Cylindropuntia imbricata</i> Prickly pears - <i>Opuntia</i> spp.</p>		<p>Silver-leaf nightshade - <i>Solanum elaeagnifolium</i> Smooth tree pear - <i>Opuntia monacantha</i> (Note: excludes <i>Opuntia ficus-indica</i> (Indian fig) – see Appendix 2 Tiger pear - <i>Opuntia aurantiaca</i> Velvety tree pear - <i>Opuntia tomentosa</i></p>
Land area where requirements apply	Outcomes to demonstrate compliance with general biosecurity duty	Strategic response in the Western region
<p>All of the Western Local Land Services region</p>	<p>Land managers should mitigate the risk of the plant being introduced to their land Land managers should mitigate spread of the plant from their land A person should not buy, sell, move, carry, or release the plant into the environment Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell</p>	<p>Identification of key sites/assets Species managed in accordance with published weed management plans Land managers should implement best practice measures that suppress spread Surveillance and mapping to locate all infested properties Identify priority assets for targeted management Monitor change in current distribution to ensure containment of spread High level pathways analysis to identify potential introduction areas and preventative options Engagement programs and community awareness Facilitate strategic release of bio-control agents if available</p>

Regional priority weed category – ASSET PROTECTION:

These weeds are widely distributed in some areas of the region. Their spread should be minimised to protect priority assets

Harrisia cactus - *Harrisia species*

Spiny burrgrass - *Cenchrus longispinus*, *Cenchrus spinifex* (syn. *C. incertus*)

Land area where requirements apply	Outcomes to demonstrate compliance with general biosecurity duty	Strategic response in the Western region
All of the Western Local Land Services region	<p>Land managers should mitigate the risk of the plant being introduced to their land</p> <p>Land managers should mitigate spread of the plant from their land</p> <p>A person should not buy, sell, move, carry, or release the plant into the environment</p> <p>Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value</p>	<p>Identification of key sites/assets</p> <p>Species managed in accordance with published weed management plans</p> <p>Land managers should implement best practice measures that suppress spread</p> <p>Surveillance and mapping to locate all infested properties</p> <p>Identify priority assets for targeted management</p> <p>Monitor change in current distribution to ensure containment of spread</p> <p>High level pathways analysis to identify potential introduction areas and preventative options</p> <p>Engagement programs and community awareness</p> <p>Facilitate strategic release of bio-control agents if available</p>

Appendix 2: Other regional weed lists

A2.1 Additional species of concern

Species that are identified as posing production and/or environmental risks within a number of current regional weed programs, though not feasible to contain or eradicate from the region at this time.

Recommended regional approach:

- Local Land Services and local control authorities to work within existing widespread weed programs for strategic asset protection.
- Local Land Services will facilitate targeted engagement/awareness raising activities where appropriate, focussing on the agronomic, cultural, and plant hygiene aspects of management.
- Western stakeholders facilitate targeted research and development activities where deemed appropriate by the Western Regional Weed Committee.
- Local Land Services to facilitate bio control release programs in the region in conjunction with local control authorities and other stakeholders.
- Local control authorities will prioritise the application of the general biosecurity duty, where considered necessary to assist with management of these species.
- The Western Regional Weed Committee will periodically assess the status of these species based on the results of ongoing inspection activities.

Table A2.1: Additional species of concern.

Common name	Scientific name
Herbicide resistant weeds	
Annual ryegrass	<i>Lolium rigidum</i>
Barley grass	<i>Hordeum spp.</i>
Blackberry nightshade	<i>Solanum nigrum</i>
Brome grass	<i>Bromus spp.</i>
Common wow thistle	<i>Sonchus oleraceus</i>
Flax-leaf fleabane	<i>Conyza bonariensis</i>
Indian hedge mustard	<i>Sisymbrium oriental</i>
Lincoln weed / Sand rocket	<i>Diplotaxis tenuifolia</i>
Silver grass / Squirrel-tailed fescue	<i>Vulpia bromoides</i>
Wild oat	<i>Avena spp.</i>
Wild radish	<i>Raphanus raphanistrum</i>
Wild turnip / Mediterranean turnip	<i>Brassica tournefortii</i>

Common name	Scientific name
Amenity weeds	
Bathurst burr	<i>Xanthium spinosum</i>
Castor oil plant	<i>Ricinus communis</i>
Cat-head	<i>Tribulus terrestris</i>
Khaki weed	<i>Alternanthera pungens</i>
Poison ivy	<i>Toxicodendron radicans</i>
Rhus tree	<i>Toxicodendron succedaneum</i>
Toxic pasture plants	
Cat-head	<i>Tribulus terrestris</i>
Common heliotrope	<i>Heliotropium europaeum</i>
Noogoora burr	<i>Xanthium occidentale</i>
Other	
Indian fig	<i>Opuntia ficus-indica</i>
Onion weed	<i>Asphodelus fistulosus</i>
Pepper tree	<i>Schinus molle</i>
Statice	<i>Limonium sinuatum</i>
Ward's weed	<i>Carrichtera annua</i>
Winged sea lavender	<i>Limonium lobatum</i>

