Murray Regional Strategic Weed Management Plan 2017 - 2022

Developed in partnership with the Murray Regional Weed Committee
Published by Murray Local Land Services

Murray Regional Strategic Weed Management Plan 2017-2022
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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing on 23 June 2017. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user’s independent adviser.
# Contents

Acknowledgement of Country ........................................................................................................................... 2  
Acknowledgement of Contributors .................................................................................................................... 2  
Murray Local Land Services Board Chair’s Foreword .................................................................................. 3  
Murray Regional Weed Committee Chair’s Foreword ............................................................................... 3  
Executive summary ........................................................................................................................................ 4  

1. Intent of plan ............................................................................................................................................ 6  
   1.1 Introduction .................................................................................................................................... 7  
   1.2 Vision, goals and objectives ........................................................................................................... 7  
   1.3 A more strategic approach to weed management ...................................................................... 7  

2. Policy framework .................................................................................................................................... 12  
   2.1 Overview of key plans and legislation ........................................................................................ 12  
   2.2 Guiding legislation ....................................................................................................................... 13  
   2.3 Biosecurity Act .............................................................................................................................. 13  

3. Weed management in the region .......................................................................................................... 16  
   3.1 Overview ....................................................................................................................................... 16  
   3.2 Recent strategic weed management ........................................................................................... 17  

4. Weed risk assessment and prioritisation .............................................................................................. 18  
   4.1 Weed management prioritisation ............................................................................................... 18  
   4.2 Regional prioritisation process .................................................................................................... 19  

5. Actions ..................................................................................................................................................... 21  
   5.1 Overview ....................................................................................................................................... 21  

6. Implementation ...................................................................................................................................... 23  
   6.1 Regional Weed Committee .......................................................................................................... 23  
   6.2 Guiding principles for implementation ....................................................................................... 23  
   6.3 Processes supporting implementation ........................................................................................ 24  
   6.4 Delivery partners ........................................................................................................................... 24  
   6.5 Investment ..................................................................................................................................... 27  
   6.6 Community engagement .............................................................................................................. 27  

7. Measuring success and continuous improvement ............................................................................... 28  
   7.1 Measuring performance ............................................................................................................... 28  
   7.2 Adaptive management and continuous improvement .............................................................. 30  
   7.3 Plan review .................................................................................................................................... 30  

8. Abbreviations .......................................................................................................................................... 30  

9. Glossary ................................................................................................................................................... 31  

10. References ............................................................................................................................................ 32  

Appendix 1: Priority weeds for the Murray region .................................................................................... 33  
Appendix 2: Other regional weeds list ...................................................................................................... 44
Acknowledgement of Country

We acknowledge that the protection and promotion of Aboriginal culture, heritage, traditional land management practices and spiritual beliefs are of great importance to the Traditional Owners of the lands and waters in the Murray region, and benefits the whole community. Strengthening shared cultural values will contribute to a more reconciled and resilient Murray region community.

Acknowledgement of Contributors

The Regional Strategic Weed Management Plan was developed by the Murray Regional Weed Committee on behalf of the Murray Local Land Services Board. The Board wishes to acknowledge the work of the Committee, the Riverina/Murray Executive Project Team and regional support staff in developing this plan. The Board would also like to thank the Technical Sub-committee of the State Weeds Committee for their support in undertaking weed risk prioritisation. The Board also thanks the State Weeds Committee, NSW Office of Environment and Heritage, and NSW Department of Primary Industries for their guidance in the plan’s development.

Development of this plan was supported through the NSW Government’s Weed Action Program funding.
Murray Local Land Services
Board Chair’s Foreword

On behalf of the Board of Murray Local Land Services I would like to thank the members of the Murray Regional Weed Committee for their time, expertise and effort to produce this Regional Strategic Weed Management Plan.

The development of the Regional Weed Management Plan is a result of the introduction of the NSW Biosecurity Act 2015, which repealed the Noxious Weeds Act 1993. The plan also gives support to Goal 1 of the NSW Biosecurity Strategy 2013-2021: “biosecurity is a shared responsibility”.

The Murray Regional Weed Committee includes representatives from local government and county councils, NSW Department of Primary Industries, state government agencies managing crown lands (including the National Parks and Wildlife Service, Forestry Corporation of NSW, Roads and Maritime Services and Department of Industry - Lands), NSW Farmers, Landcare, rural landholders and Murray Local Land Services.

The Board wishes to acknowledge the work of the Murray Regional Weed Committee, its Chair Neil Hibberson, the Riverina/Murray Executive Project Team and regional support staff in developing this plan. The Board would also like to thank the Technical Sub-committee of the State Weeds Committee for their support in undertaking weed risk prioritisation. The Board also thanks the State Weeds Committee, NSW Office of Environment and Heritage, and NSW Department of Primary Industries for their guidance.

The plan sets the priorities for weed management in the Murray region for five years from 2017. We look forward to community support for the plan and the opportunity to work with all stakeholders in weed management.

Richard Bull
Chair Murray Local Land Services

Murray Regional Weed Committee Chair’s Foreword

The Regional Strategic Weed Management Plan marks a new phase of weed management in our region, bringing together state and local government with landholders and stakeholders in a combined effort to tackle ongoing weed issues.

Weed management is an integral part of sustainable agriculture, sound environmental management and the maintenance of biosecurity that underpins our rural industries. This plan will help us achieve our strategic goals in integrated land and water management across the region.

I would like to thank all members of the Murray Regional Weed Committee and the Executive Project Team for their contribution and spirit of cooperation, which helped me as Chair guide the process and produce a practical document that maps the way forward for weed management in the Murray region.

Mr. Neil Hibberson
Chair, Murray Regional Weed Committee
Executive summary

Our vision

Biosecurity protects the economy, environment and community from the negative impacts of pests, diseases and weeds. As such, it is vital for the health, wellbeing and prosperity of the state. The Murray Regional Strategic Weed Management Plan focuses on managing weeds to improve the region's biosecurity. Our vision is to protect the Murray's environment, landscape, livelihood, cultural and lifestyle values from weeds by strengthening the sustainability of the natural environment, primary industries, and local communities in the region.

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

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

Working together

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

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

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

Sharing responsibility

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

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

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

Weed Priorities

An expert panel used best available knowledge and an internationally-recognised risk-assessment process to identify the high-priority weed species in the Murray region. Weed prioritisation is guided by the principle that managing weeds earlier rather than later is more cost effective (see Figure 4.1). The weed management objectives listed support this principle and prioritises outcomes which can be achieved during the early stages of the invasion process.

The plan identifies regional priority weeds, including management objectives and outcomes to demonstrate
compliance with the General Biosecurity Duty. The plan also identifies state level and other priority weeds to provide further focus to weed management in the region.

Building on the past

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

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

A range of stakeholders have played an important role in weed management planning in the region over many years. This plan builds on past efforts and has gained immeasurably from the accumulated experience and expert local knowledge of committee members and their networks. The Murray regional weed committee includes representatives from Local Government and County Councils, NSW Department of Primary Industries, State government agencies managing state owned lands (Office of Environment and Heritage, National Parks and Wildlife Service, Forestry Corporation of NSW, Roads and Maritime Services and Department of Industry – Lands), NSW Farmers, Landcare, rural landholders and Murray Local Land Services.

Implementation

The Murray Local Land Services Board will have oversight of the plan implementation. The plan will guide investment in weed management across the region and provide a consistent basis for regional weed planning and implementation. The regional weed committee will play an important role in providing advice to the Board on implementation of the plan. Key stakeholders and managers of land including the Local Control Authorities will implement the plan under the principle of shared responsibility for weed management. Implementation is further detailed in Chapter 6 of this Plan.

Vision:

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

**Goal 1: Responsibility for weed biosecurity is shared by the Murray region community.**

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

- building community capacity
- building stronger partnerships
- fostering a shared responsibility
- promoting behavioural change

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

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

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

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

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

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

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

1.1 Introduction

The Murray Regional Strategic Weed Management Plan provides a framework for regional weed management. The plan supports regional implementation of the NSW Biosecurity Act 2015 by articulating community expectations in relation to effective weed management and facilitating a coordinated approach to weed management in the region. The plan (and the legislation that underpins it) is based on the premise that biosecurity is everyone’s responsibility. It supports development of this culture, guiding the community in effective and coordinated management of weeds and meeting relevant statutory obligations.

The plan relates to all lands and waters in the Murray Local Land Services region of NSW (Figure 1.1).

![Figure 1.1: Murray Local Land Services region, including local government areas](image)

This plan is underpinned by expert local knowledge of regional weed committee members and their networks. It will guide resource allocation and investment in the region and provide a consistent basis for regional planning and delivery.

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

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

This plan sets the vision, goals and objectives for weed management in the Murray region for the next five years and outlines the strategies and actions through which these goals will be achieved.
1.2 Vision, goals and objectives
This plan provides a sound basis for a co-operative and co-ordinated approach to weed management. The Vision for this plan is:

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

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

1. Responsibility for regional weed biosecurity is shared by the Murray region community
2. Weed biosecurity supports profitable, productive and sustainable primary industries
3. Weed biosecurity supports healthy, diverse and connected natural environments
4. Weed biosecurity is supported by coordinated, collaborative and innovative leadership.

The objectives of this plan, outcomes we expect to see, and the strategies to achieve them, are shown in Table 1.1 (pp8-9).

1.3 A more strategic approach to weed management
1.3.1 Drivers
The direct and indirect costs of weeds and their management vary depending on the nature of the target weed species, the surrounding landscape, and the scale of the infestation. Management can be complicated further by factors such as climate (e.g. good years can result in prolific growth and seed set), and accelerated dispersal by mechanical means (i.e. through poor hygiene practices) and/or animals (e.g. spread through droppings and/or in the coats of livestock). The cost of weed management can also cause significant financial and mental stress for land managers faced with controlling large infestations. Regional drivers that affect the distribution, extent, and management of weeds in the Murray region are broadly summarised as:

- NSW Weed management reforms
- changing climate and the increased likelihood of extreme climatic events (e.g. floods; fire),
- changing population size, growth rate, and density and distribution of regional communities,
- farm aggregation through the purchase of land by corporations,
- land-use change, diversification, and intensification,
- market forces, increasing input costs, and the level of uptake of new technologies,
- resource-use change, and the adequate supply of natural resources (e.g. water),
- community values and expectations around natural resource management
- competing priorities for resources and funding across both the public and private sectors

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

The emphasis in the NSW Invasive Species Plan and biosecurity legislation is on prevention of invasive species and early intervention in the incursion process (Figure 4.1). Early and strategic investment to prevent and eradicate invasive species provides more cost-effective and successful weed control outcomes.
**Table 1.1: Vision, Goals, Outcomes, Objectives and Strategies of the Murray Regional Strategic Weed Management Plan**

<table>
<thead>
<tr>
<th>VISION</th>
<th><strong>GOALS</strong></th>
<th><strong>OUTCOMES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>Government, industry and the people of the Murray region working together to protect the environment, economy and community from the negative impacts of weeds.</td>
<td>Goal 1. Responsibility for weed biosecurity is shared by the Murray region community</td>
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<tr>
<td></td>
<td></td>
<td>Goal 2. Weed biosecurity supports profitable, productive and sustainable primary industries</td>
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<tr>
<td></td>
<td></td>
<td>Goal 3. Weed biosecurity supports healthy, diverse and connected natural environments</td>
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<tr>
<td></td>
<td></td>
<td>Goal 4. Weed biosecurity is supported by coordinated, collaborative and innovative leadership</td>
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<tr>
<td></td>
<td><strong>SHARED RESPONSIBILITY</strong></td>
<td>• Weed management is integrated and co-ordinated across all tenures.</td>
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<td></td>
<td><strong>SUSTAINABLE LANDSCAPES</strong></td>
<td>• Weeds are monitored at landscape and industry scales and developing problems are proactively managed.</td>
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<tr>
<td></td>
<td></td>
<td>• Weed biosecurity is supporting landscape health and key assets important to biodiversity.</td>
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<tr>
<td></td>
<td></td>
<td>• Primary industries are using leading weed management practices that contribute to increases in productivity, sustainability and market access with minimal impacts on natural resources.</td>
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<td></td>
<td></td>
<td>• Aboriginal cultural heritage areas are protected.</td>
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<td></td>
<td>• Weed biosecurity threats are continually identified, assessed and prioritised across Murray region environments and primary industry sectors.</td>
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<td></td>
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<td>• Weed biosecurity emergencies and high risk pathways are well managed.</td>
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<td></td>
<td>• Impacts on high priority assets have been minimised through risk based weed management programs.</td>
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<tr>
<td></td>
<td><strong>COLLABORATIVE LEADERSHIP AND INNOVATION</strong></td>
<td>• Engagement, collaboration and involvement of local people in decision making are co-ordinated.</td>
</tr>
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<td></td>
<td>• Relevant and timely information supports decision making by the Murray Regional Weed Committee and the State Weeds Committee.</td>
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<td></td>
<td>• Information, monitoring, performance evaluation and reporting systems, provide for benchmarking, continuous improvement, stakeholder feedback and innovation.</td>
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<td>• A strong evidence and knowledge base is supporting innovation and strengthening research.</td>
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<tr>
<td></td>
<td></td>
<td>• Changes in weed behaviour under a changing climate are being understood and monitored.</td>
</tr>
<tr>
<td>VISION</td>
<td>Government, industry and the people of the Murray region working together to protect the environment, economy and community from the negative impacts of weeds.</td>
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</tbody>
</table>
| OBJECTIVES | • Communicate a clear strategic vision and build support for a strong and integrated biosecurity system for the region.  
• Provide the foundation for all customers and stakeholders to work together, and to fully utilise knowledge and expertise across all groups.  
• Foster accountability for weed management in the region at all levels.  
• Improve effectiveness in prevention and response to new weed incursions.  
• Prevent, eradicate, control and manage the impacts of weeds.  
• Understand and have regard for the impacts of a changing climate on weed biosecurity.  
• Provide a framework for more detailed planning, monitoring and reporting of weed management programs.  
• Provide guidance for weed management prioritisation, decision making and actions at a regional level.  
• Support consistent and coordinated regional weed management planning and local delivery.  
• Support leading practice in weed management through ongoing creation and sharing of knowledge and spatial information.  
• Provide a framework for more detailed planning, monitoring and reporting of weed management programs.  
• Provide guidance for weed management prioritisation, decision making and actions at a regional level.  
• Support consistent and coordinated regional weed management planning and local delivery.  
• Support leading practice in weed management through ongoing creation and sharing of knowledge and spatial information. |
| STRATEGIES | 1.1 Promote weed management and behavioural change in the community.  
2-3.1 Improve surveillance, reporting and tracing systems for weeds.  
2-3.2 Improve prevention, preparedness and response to weed emergencies.  
2-3.3 Eradicate or prevent the spread of new weeds.  
2-3.4 Contain and manage impacts of widespread weeds.  
2-3.5 Support weed research and implement developments in weed science and technology.  
2-3.6 Assess and respond to changing weed risks associated with climate change.  
4.1 Provide governance and leadership that supports collaborative, effective and efficient weed management.  
4.2 Adopt adaptive, contemporary planning and processes.  
4.3 Develop a regional weed knowledge base and information system that supports state standards.  
4.4 Develop consistent systems for monitoring, evaluating and reporting on the effectiveness of weed management. |
1.3.2 Weed committees and development of this plan

The NSW weed reforms recommended that Local Land Services assume responsibility for forming a weed committee in each region to act as a Community Advisory Group and provide appropriate support for weed management and planning. The Murray Regional Weed Committee includes representatives from Murray Local Land Services, NSW Department of Primary Industries (DPI), state government agencies managing state owned lands (Office of Environment and Heritage (OEH), Forestry Corporation, Roads and Maritime Services and Department of Industry – Lands), local government and county councils, NSW Farmers, Landcare, and rural landholders. Through this representation, the committee provides tenure neutral strategic planning and co-ordination of weed management activities at a regional level and also provides a forum for community and stakeholders to raise issues and find solutions.

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

This plan represents a partnership between the regional weed committee and its representative organisations. The committee developed this plan for the Murray Local Land Services Board.

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

Figure 1.2: Roles in weed management
Figure 1.3 shows the relationship between the regional weed committee, the Murray Local Land Services Board and other Community Advisory Groups. Murray Local Land Services provides executive support to the committee.

![Diagram of relationship between Murray Local Land Services Board and other groups]

**Figure 1.3: Regional Weed Committee relationship to Murray Local Land Services Board.**
2. Policy framework

2.1 Overview of key plans and legislation

The Regional Weed Committee considered a range of relevant plans and strategies in development of this plan, at national, state and local levels.

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

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

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

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

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

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

2.3 Biosecurity Act

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

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

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

2.3.1 General Biosecurity Duty

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

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

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

Table 2.1: Tools of the Biosecurity Act 2015.

| **Prohibited Matter:** | Biosecurity matter listed in Schedule 2, Part 1 of the NSW Biosecurity Act 2015 for the purpose of preventing entry of that matter into NSW or a part of NSW. Prohibited matter relevant to the region is listed in Appendix A1.1 of this plan. Prohibited matter includes weeds nationally targeted for eradication and presently not in NSW. |
| **Control Order:** | Establishes one or more control zones and related measures to prevent, eliminate, minimise or manage a biosecurity risk or biosecurity impact. Control orders are for managing weeds under approved eradication programs and last for five years (or can be renewed for longer-term eradication programs). Weed Control Order 2017 (Part 6 Division 1) under the NSW Biosecurity Act 2015 will include weeds that are subject to a Control Order for the purpose of eradication. Further Control Orders will be proposed as needed to address subsequent eradication campaigns. |
| **Biosecurity Zone:** | Aims at containment of a species and provides for ongoing strategic management in a defined area of the state. A Biosecurity Zone specifies the measures that must be taken in the defined area to manage the weed. Outcomes to demonstrate compliance with the GBD may also apply to the species either within the zone or outside it. |
| **Mandatory Measures:** | The regulations may require persons who deal with biosecurity matter or carriers to take specified actions to prevent, eliminate or minimise a biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing. Those requirements are Mandatory Measures and include Weeds of National Significance (WoNS) (Division 8 Clause 33), Parthenium weed carriers - machinery and equipment (Division 8 Clause 35), and duty to notify of importation of plants into the state (Division 8 Clause 34). Mandatory measures relevant to the region are listed in Appendix 1. |
| **General Biosecurity Duty (GBD):** | The purpose of the GBD is to manage the spread and/or impact of all weeds that pose a biosecurity risk (2.3.1 above provides more detail). The GBD is in addition to any requirements included in a control order, biosecurity zone or other instrument made under the Biosecurity Act 2015. For priority weeds, outcomes to demonstrate compliance with the GBD are detailed in Appendix 1 of this plan. |
| **Biosecurity Direction:** | An Authorised Officer may issue a Biosecurity Direction to a person or class of persons, if the officer reasonably believes it is necessary for any of the following: |
| | • to prevent, eliminate or minimise a biosecurity risk |
| | • to prevent, manage or control a biosecurity impact |
| | • to enforce any instrument under the Biosecurity Act 2015 |
| **Biosecurity Undertaking:** | Is a written undertaking by a person, accepted by an authorised officer. It must specify the measures a person has agreed to implement to remedy a contravention, likely contravention, or suspected contravention of the Act and when those measures must be implemented by. It is not an admission of guilt. |
| **Emergency Order:** | May be issued to respond to a current or imminent biosecurity risk that may have a significant impact. |
2.3.3 Enforcing the *Biosecurity Act 2015*

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

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

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

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

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

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

2.3.4 Agreed standards for weed management

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

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

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

3.1 Overview

The NSW Murray Local Land Services (LLS) Region encompasses a land surface area of over 42,000 km². Bordered by the Murray River in the south, the region’s land forms and vegetation communities range from Australia’s highest alpine peaks and slopes, forests, and grassy woodlands and grasslands of the South West Slopes region to the semi-arid woodlands, and vast grasslands and shrublands of the Riverina Plains. The region is broadly defined by seven landscapes or ‘systems’: Murrakool, Billabong-Yanco, Eastern Riverina, South West Slopes, Cadell, Berriquin-Murray, and Upper Murray. These systems are each characterised by a distinct set of natural, social, and economic features that influence how business gets done in the area.

The region’s population is approximately 107,000 with communities concentrated in towns along the Murray, Edward-Kolety, and Billabong-Yanco river systems in towns that include Barham, Corowa, Moama, Deniliquin, Moulamein, and Tocumwal. Albury is the only major city in the region. Towns such as Berrigan, Finley, Holbrook, Jerilderie, Moulamein and Tumbarumba are important regional centres, which also service more remote communities. The urban and peri-urban interface is prominent in the regional centres, and particularly around Albury. Around 75% of land in the Murray region is privately owned (Murray LLS 2016).

Aboriginal cultural heritage is prominent with the Murray region having always supported large populations of Aboriginal peoples, and the region’s Aboriginal communities maintain an ongoing and unbroken connection to country. Aboriginal people, along with other stakeholders, have an important role to play in the management of weeds on country.

Agricultural industries are diverse, including irrigated and dryland cropping, livestock grazing, and dairy production with an estimated one third of the region’s community involved directly in agricultural enterprises. Extensive irrigation networks and the Snowy Hydro-Electric Scheme supply water to low rainfall areas. The region’s natural, social, and economic capital is highly dependent on the availability and condition of natural resources.

Weeds and weed management present a significant challenge to two of the Murray region’s four strategic goals: biosecure, profitable, productive and sustainable primary industries and healthy, diverse, and connected natural environments (Murray LLS 2016).

3.1.2 Key weed impacts in the Murray region

Impact of weeds on agriculture

The negative impacts of weeds on agriculture can be broadly classified as: lost or reduced pasture forage quality (e.g., through proliferation of toxic or unpalatable weeds), increased input costs (i.e., the cost of weed management), reduced product quality (e.g., through contamination of harvests or carcasses), and increased logistical constraints (e.g., where stock mustering or farm machinery is impeded by weed infestations).

Impact of weeds on animal and human health

Along with their economic costs, certain weed species are also associated with negative impacts on human and animal health. These impacts can be broadly classified as: skin and/or mucus membrane irritations, respiratory problems, toxicity, and/or physical injury. Additionally, some weeds may affect the amenity of land, reducing its aesthetic and recreational values with indirect effects on human health and wellbeing.

Impact of weeds on biodiversity

Weeds pose a significant threat to biodiversity in the Murray region by directly impacting on growth and survival of native flora and fauna, and affecting the structure and function of terrestrial and aquatic ecosystems. A review of the impact of weeds on biodiversity in NSW (NSW DPI and OEH 2011) indicated that 55 weed species in the former Murray Catchment Management Authority region were threatening biodiversity, including 24 threatened native plant and animal species (Coutts-Smith and Downey 2006). Management and investment priorities for weeds affecting biodiversity values are generally based on the value of the natural assets, investor preferences, community interest and the ability for collaboration and value-adding to other weed management programs.
Impact of weeds in aquatic environments

Aquatic weeds affect the ecological condition and recreational value of waterways by altering dissolved oxygen levels, restricting boating and swimming (in some instances becoming a safety risk), interfering with irrigation activities, and out-competing native aquatic plants. Many water weed species were introduced to waterways after being introduced to Australia for use as aquarium and/or garden plants. The spread of some species has been hastened by boating and fishing.

Impact of weeds in urban and peri-urban landscapes

Garden escapees are a particular problem around bushland that borders towns. These species invade local bushland, reducing the aesthetic appeal, condition, and habitat value of these areas. Their spread is exacerbated by illegal dumping of garden waste from urban backyards.

3.2 Recent strategic weed management

Weed Advisory Committees

Prior to the implementation of NSW weed reforms in 2015 and the formation of the Murray Regional Weed Committee (RWC) under Murray LLS, the Eastern and Western Riverina Noxious Weeds Advisory Groups (ERNWAG and WRNWAG) were the two peak regional weed bodies dealing with prioritisation of noxious weed management in the Riverina region, including the Murray, Murrumbidgee, Lower Murray Darling, and Lachlan catchments. These groups consisted of key stakeholders in weed management from Tumut in the east, to Wentworth in the west, Carrathool in the north and the Murray River in the south. Both groups ceased operating in late 2015, but have played a pivotal role in regional weed management, including delivering regional components of the NSW Weeds Action Program (WAP), and joint preparation of the Murray Catchment Regional Weed Strategy (Bosse and Verbeek 2008).

Murray Local Land Services

Murray LLS has responsibility for the development and implementation of the Murray Regional Strategic Weed Management Plan (the plan) and other associated plans or strategies in collaboration with key delivery partners. Key biosecurity goals are detailed in the Murray Local Strategic Plan. Local Land Services provides information on the impact of invasive weed species on natural resources and assists community groups, Landcare and other stakeholders to seek financial assistance and funding for coordinated programs. Murray LLS is also responsible for the management of over 50,000 hectares of travelling stock reserves and routes in the Murray region.

Local Government & Local Control Authorities

Eight local government areas (LGA) operate in the Murray LLS region and one county council. Along with their compliance role in weed management and responsibilities for roadside vegetation management, all local government areas and the County Council have been active members of the former ERNWAG and WRNWAG that have played a key role in community engagement and weed management over many years.

Other public land managers

Other significant public land managers in the Murray region include NSW National Parks and Wildlife Service, Forestry Corporation of NSW, DPI – Water and DPI – Lands. These organisations manage significant areas of public land, which include Kosciuszko National Park, Murray Valley River Red Gum National and Regional Parks, Werai Forest and Nimmie-Caira.

The Murray region community

Community plays an important role in minimising the impacts of invasive weeds, including complementing the work done by government agencies, land managers, and external funding bodies. Land managers and landholders can help detect new weed incursions and support coordinated eradication programs. The Murray Region’s Landcare and producer groups also play a key role in regional weed management by coordinating activities and providing resources to build the capacity of community to undertake effective weed management practices. Particular challenges for community and landholder-driven weed management in the Murray region include:

- absentee landholders and farming entities with low profit margins (difficult to engage)
- lack of awareness and understanding of weed management responsibilities on private land
- limited resources (financial and labour) to manage large infestations.
4. Weed risk assessment and prioritisation

4.1 Weed management prioritisation

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

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

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

4.1.1 NSW Weed Risk Management system

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

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

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

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

Weed Risk Management system assessments were undertaken at the regional scale to ensure the outcomes reflected regional conditions. Where there was significant variation in weed risk or weed distribution in the region, the assessments were conducted at a sub-regional level, to determine containment zones or any other sub-regional response.

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

**Table 4.1: Regional weed management categories**

<table>
<thead>
<tr>
<th>Category</th>
<th>Objective</th>
<th>Characteristics of Weeds in this Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>To prevent the weed species arriving and establishing in the Region</td>
<td>These species are not known to be present in the region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>They have a high to very high weed risk (highly invasive and high threat) and have a high likelihood of arriving in the region due to potential distribution and/or an existing high risk pathway.</td>
</tr>
<tr>
<td>Eradication</td>
<td>To permanently remove the species and its propagules from the region</td>
<td>These species are present in the region to a limited extent only and the risk of re-invasion is either minimal or can be easily managed.</td>
</tr>
<tr>
<td></td>
<td>OR to destroy infestations to reduce the extent of the weed in the region or a part of it with the aim of local eradication</td>
<td>They have a high to very high weed risk and high feasibility of coordinated control.</td>
</tr>
<tr>
<td>Containment</td>
<td>To prevent the ongoing spread of the species in all or part of the region</td>
<td>These species have a limited distribution in the region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regional containment strategies aim to prevent spread of the weed from any invaded part of the region.</td>
</tr>
<tr>
<td>Asset Protection</td>
<td>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.</td>
<td>These weed species are widespread and unlikely to be eradicated or contained within the wider regional context.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Effort is focused on reducing weed threats to protect priority high value assets.</td>
</tr>
</tbody>
</table>
4.2.1 Priority weed list for the region

The regional prioritisation process culminated in the identification of the priority high risk weeds and the development of the regional priority weed list for the region - Appendix 1 (A1.2) of this plan. This identifies outcomes to demonstrate compliance with the General Biosecurity Duty for listed species. State level priority weeds (Appendix 1 (A1.1)) were determined by the Department of Primary Industry. Management requirements for weeds, whether that be specific regulatory measures (state level priorities) or outcomes to demonstrate compliance with the General Biosecurity Duty (regional priority weeds), are also detailed in Appendix 1.

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

4.2.2 Additional regional weed lists

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

Both the regional priority weed list (Appendix 1) and the additional regional weed lists (Appendix 2) may be amended as necessary in accordance with state-level reviews and the regional review process.
5. Actions

5.1 Overview

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

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

Table 5.1: Goals, strategies and actions of the plan

<p>| Goal 1: Responsibility for weed biosecurity is shared by the Murray region community |</p>
<table>
<thead>
<tr>
<th>Strategies</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Promote weed management and behavioural changes in the community</td>
<td>1.1.1 Develop communications products using Community Based Social Marketing to raise the profile of weed management in the Murray region.</td>
</tr>
<tr>
<td>1.2. Build stronger partnerships that support weed management</td>
<td>1.2.1 Develop partnerships that support tenure neutral weed management.</td>
</tr>
<tr>
<td></td>
<td>1.2.2 Foster networks, alliances and aboriginal engagement that support communities and stakeholders in weed management activities.</td>
</tr>
<tr>
<td></td>
<td>1.2.3 Develop and implement mechanisms to protect biodiversity and support management of weeds on non-productive land.</td>
</tr>
<tr>
<td>1.3 Enhance community-wide capacity in sharing responsibility for weed management</td>
<td>1.3.1 Enhance existing communication networks to increase effective dissemination of information and understanding of shared responsibility and a whole of community approach to weed management.</td>
</tr>
<tr>
<td></td>
<td>1.3.2 Provide greater opportunities for education, training and community based programs that support behavioural change and increase community capacity to manage priority weeds.</td>
</tr>
</tbody>
</table>

| Goal 2: Weed biosecurity supports profitable, productive and sustainable primary industries and Goal 3: Weed biosecurity supports healthy, diverse and connected natural environments |
| 2-3.1 Improve surveillance, reporting and tracing systems for weeds | 2-3.1.1 Improve surveillance, reporting and tracing for weeds: |
| | • Widen implementation of early detection by encouraging partners to become involved in the High Risk Pathways and Sites inspection program and report via BIS |
| | • Develop tools, systems and services (e.g. drones) to allow for efficient weed mapping |
| | • Build community capacity to assist with early detection |
| | • Undertake coordinated surveillance activities for priority weeds. |
| | 2-3.1.2 Support state-wide processes in development of more efficient ways of demonstrating proof of freedom from weeds. |
| 2-3.2 Improve prevention, preparedness and response to weed emergencies | 2-3.2.1 Improve cross-jurisdictional collaboration on consistent and effective approaches to preventing establishment of new weed species. |
| | 2-3.2.2 Manage high risk pathways, using targeted surveillance, region-wide and consistent industry codes, and education and enforcement mechanisms. |
| | 2-3.2.3 Improve prevention and response to weed biosecurity emergencies through improved identification processes, improved communication and reporting networks, and rapid responses to management of new incursions of priority weeds. |
| 2-3.3 Eradicate or prevent the spread of new weeds | 2-3.3.1 Develop standardised and consistent planning for:  
- Weeds listed in Appendix 1 to this plan  
- New weed incursions, including rapid response plans and associated cost sharing arrangements  
2-3.3.2 Work with other jurisdictions to standardise weed biosecurity arrangements across regional and state borders  
2-3.3.3 Ensure management occurs for priority weeds in alignment with relevant State, Regional or Sub-regional objectives. |
|------------------------------------------------|---------------------------------------------------------------|
| 2-3.4 Contain and manage impacts of widespread weeds | 2-3.4.1 Develop and promote best practice weed management to minimise the spread and reduce the impacts of widespread weeds,  
2-3.4.2 Support the ongoing development and coordination of new and existing cooperative programs for reducing or controlling the current extent of widespread weeds in priority sites.  
2-3.4.3 Actively manage widespread weeds which threaten key sites/assets in alignment with State, Regional or Sub-regional objectives.  
2-3.4.4 Continue to contribute to new and existing state and national arrangements for managing established weeds. |
| 2-3.5. Support weed research and implement developments in weed science and technology | 2-3.5.1 Document invasive weed species research priorities in collaboration with government, industry, research providers, the aboriginal community, and the wider community and report these to the State Weeds Committee. |
| 2-3.6 Assess and respond to changing weed risks associated with climate change | 2-3.6.1 Use predictive modelling (e.g. Weed Futures, BioClim, ANUclim) to identify the likely weed species and the environmental, social and economic values that will be vulnerable to invasive weeds under a changing climate. |

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

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

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

6.1 Regional Weed Committee

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

In implementing the plan the committee will work with LLS to:

- advise the State Weeds Committee on weed priorities and other strategic matters in the region
- liaise with neighbouring regional weed committees, especially with respect to any significant incursions and potential movement of priority weeds from one region to another promote weed policy, risk assessments, declarations, best practice and control outcomes to member organisations and the community
- provide advice to local boards on implementation on a region-wide perspective, using committee expertise and best available knowledge, research and technology
- provide advice to management on regional communication, education, training and awareness programs that are consistent with the plan
- promote effective co-ordination of weed management across agencies and tenure, including appropriate resource and information sharing between member organisations
- identify synergies for collaboration and opportunities for funding and priority project delivery
- identify information and research needs and appropriate collaborative actions
- provide advice to local boards on effectiveness of weed control activities in the region to ensure it is consistent with the plan and continues to inform management actions and planning
- review and provide advice on the outcomes of collaborative planning and delivery processes.

6.2 Guiding principles for implementation

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

- Effective stakeholder collaboration and shared responsibility are essential to effective weed management.
- Behavioural change and increasing community capacity are important to effective weed management.
- Prevention and early intervention are the most effective weed management tools.
- Causes of weed invasion and spread are managed wherever possible, not just the symptoms.
- The biology and ecological requirements of weeds, including mechanisms and pathways for spread are considered in weed management.
- Innovation in weed control and management is encouraged.
- Regular monitoring, evaluation and improvement are incorporated in weed management programs.
- Weed management is an integral part of land management. Land management practices and their timing are critical to the prevention and reduction in the 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.
6.3 Processes supporting implementation

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

A range of plans and processes will support implementation of this plan as outlined below:

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

Many of these plans and processes are already underway, but require regional weed committee endorsement or further collaboration between partners.

6.4 Delivery partners

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

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

6.4.1 Lead organisations

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

6.4.2 Roles and responsibilities

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

Commonwealth government

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

State government

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

Key roles and responsibilities for these two agencies include:

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

NSW Department of Primary Industries

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

Office of Environment and Heritage and National Parks and Wildlife Service

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

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

The Department of Industry - Lands is a business unit of the NSW Department of Industry and administers and manages Crown land, which makes up approximately half the state. It develops funds and implements invasive species management strategies on land under its direct control and supports activities undertaken by community groups, reserve trusts, lessees and others that manage land on its behalf, including Councils.

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

Local government

Local government plays a significant role in biosecurity, particularly in weed management. It has an important role to play in engaging local communities, managing public lands and assisting with emergency management. Local government also makes a significant investment in local and regional weed management. Weed control functions of local government are undertaken by Local Control Authorities, including local government and county councils (formed by adjoining councils to pool resources for weed control or other specified functions). Local control authorities have a major role and responsibility for the implementation of this plan and for priority weed control including:

- enforcing legislated weed management obligations on private and public land
- 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.

Other managers of state owned land and linear reserves

A number of organisations and government agencies manage state owned land allocated for specific purposes. These include travelling stock reserves (TSRs, managed by Local Land Services), state forest (Forestry Corporation of NSW, a state owned corporation), state infrastructure such as road and rail corridors (Roads and Maritime Services and John Holland Rail Pty Ltd), corridors for energy infrastructure and Water NSW. All land managers have an important role in the management of weeds in the region, including the development and implementation of management strategies and the education of the community and other stakeholders.

Aboriginal land managers (Local Aboriginal Land Councils)

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

Throughout the region there are a number of different types of land ownership and management by Aboriginal people. Indigenous Land Use Agreements help clarify obligations of public land managers where Native Title is recognised over the land they manage (OEH, 2016).

Industry

Industry roles in weed management include:

- implementing and developing industry standards, guidelines and codes of practice
- contributing to research programs in priority areas
- participation in biosecurity response agreements and cost-sharing arrangements
- managing weeds on land and water used for production
- managing risks when trading in potential or known weed species used for, or held by, nurseries, pet shops and aquaria (water weeds), collectors, agriculture, horticulture, aquaculture and biofuels etc.
• preventing the establishment of weeds, through movement of goods, produce and equipment.

**Community groups, volunteers and individuals**

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

Individual community members also have an important role to play in helping to minimise the impacts of weeds in the region. The community provides much needed “eyes and ears” to detect and report new incursions and support eradication. Community participation also provides crucial support to the actions of responsible authorities, land managers and external funding programs. Private land owners and occupiers play an important role in the ongoing management of established weeds on their own land and in collaboration with their neighbours and the surrounding community.

### 6.5 Investment

Investment in weed management across the Murray region is delivered by public and private sectors and applied across the full range of land tenures. For land managers across the region this investment is targeted primarily at controlling weeds that pose the greatest risk to natural assets and productivity.

Since weeds affect all land tenures in the region, the regional cost of managing weeds must be borne by all stakeholders. However, management of some weed species and/or infested sites will require additional investment from external sources (typically government) to achieve control outcomes. State and local governments prioritise these weed species and sites based on four key goals of the NSW Invasive Species Plan:

1. Exclude new weeds
2. Eradicate or contain new incursions
3. Effectively manage widespread weeds at priority sites
4. Capacity building

State government provides funding to the Murray region to help manage priority weed species and sites. The Murray Weeds Action Program 2015-2020 outlines how funding of such priorities will be delivered across the region to support program partners.

Local Control Authorities and public land managers invest operational funds for weed management. These may be supplemented through weed and environmental levies, cost recovery charges of weed inspection and control, and external funding sources such as the NSW Environmental Trust and Australian government programs.

Other land managers may access grant funding through Murray LLS, state or federally-funded environmental, and community programs, to address weeds of environmental importance or as part of a community program which may target weeds of concern in the area.

The Murray RWC, in collaboration with key stakeholders, will target investment and resources to achieve regionally-consistent management of weeds. Investment will focus primarily on prevention, eradication and other high-leverage activities and will be consistent with the guiding principles for weed management.

### 6.6 Community engagement

Consistent with the guiding principles for weed management, increasing community capacity through awareness, education and training is an important means of supporting effective regional weed management. Local Control Authorities, Murray LLS and other key stakeholders also provide a range of advisory services to landholders, and will help improve awareness and link landholders to appropriate material and training.

Along with, and supporting this plan, may be further documents, such as best-practice guidelines and standards that contain more detailed information to support the community in discharging their General Biosecurity Duty.
7. Measuring success and continuous improvement

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

7.1 Measuring performance

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

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

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

7.1.1 Performance indicators and reporting

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

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

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

Shared responsibility (Goal 1)

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

Sustainable landscapes (Goals 2 and 3)

- Establishment of new incursions of priority weeds avoided
- New incursions of priority weeds eradicated or destroyed
- Spread of priority weeds prevented
- Impacts of widespread weeds on high priority assets reduced
- Sources of weed invasion identified and managed
- Weed impacts on natural ecosystems reduced or avoided.
- Weed risks or impacts to production / industries reduced (economic goal).
Collaborative leadership and innovation (Goal 4)

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

Available metrics can be used in the short term based on existing knowledge, while we refine metrics to provide more accurate measures of progress. A wide range of metrics are in use by committee member organisations, stakeholders and through the Weeds Action Program 2015-2020 and other programs. These will take time to collate and assess. Agreed metrics will be considered by the committee in consultation with the State Weeds Committee.

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

The approach to MERI must meet the needs of customers, investors and stakeholders and facilitate reporting on investment outcomes at a range of scales – local, sub-regional, and regional. Standardised reporting should support:

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

7.1.2 Information management

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

The committee will work with Local Land Services to oversee the coordinated development of systems for:

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

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

7.1.3 Strengthening science and research capacity

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

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

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

Local Land Services applies learning at the following scales to drive continuous improvement:

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

This approach is outlined in the Murray Local Land Services Local Strategic Plan and will provide the basis of MERI for this plan.

7.3 Plan review

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

8. Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS</td>
<td>Biosecurity Information System</td>
</tr>
<tr>
<td>DPI</td>
<td>NSW Department of Primary Industries</td>
</tr>
<tr>
<td>GBD</td>
<td>General Biosecurity Duty</td>
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<tr>
<td>LCA</td>
<td>Local Control Authority</td>
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<tr>
<td>LLS</td>
<td>Local Land Services</td>
</tr>
<tr>
<td>MERI</td>
<td>Monitoring, evaluation, reporting and improvement</td>
</tr>
<tr>
<td>OEH</td>
<td>The NSW Office of Environment and Heritage</td>
</tr>
<tr>
<td>NPWS</td>
<td>NSW National Parks and Wildlife Service</td>
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<tr>
<td>NRC</td>
<td>Natural Resources Commission</td>
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<tr>
<td>RSWMP</td>
<td>Regional Strategic Weed Management Plan</td>
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<tr>
<td>RWC</td>
<td>Regional Weed Committee</td>
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<tr>
<td>SWC</td>
<td>State Weeds Committee</td>
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<tr>
<td>TSR</td>
<td>Travelling stock reserve</td>
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<tr>
<td>WAP</td>
<td>NSW Weeds Action Program</td>
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</tbody>
</table>
9. Glossary

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

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

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

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

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

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

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

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

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

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

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

**Eradication**: To permanently remove a weed species and its propagules from an area such that there is little or no likelihood of re-invasion occurring.

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

**General Biosecurity Duty**: Under the Biosecurity Act 2015 a General Biosecurity Duty (GBD) applies to all weed species that present a biosecurity risk. For weeds, the General Biosecurity Duty means that any person dealing with plant matter who knows or ought reasonably to know the biosecurity risk posed by that dealing, must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable). ‘Dealing’ has a broad definition in the act. Plant matter includes plants, parts of plants and seeds.

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

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

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

**Leading practice**: Currently accepted best practice.

**Prevention**: To prevent a weed species arriving and establishing in an area.
Stakeholder: Organisations that collaborate and partner with Local Land Services directly to support customer service delivery.

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

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

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

10. References


Murray Local Land Services (2016). Murray Local Strategic Plan. Local Land Services, Albury, NSW.


New South Wales Department of Primary Industries and Office of environment and Heritage (2011). Biodiversity Priorities for widespread weeds, Orange

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

This appendix covers state level priority weed species (A1.1) as set by NSW DPI and regionally determined priorities (A1.2) as determined by the rigorous weed prioritisation and expert review process outlined in Section 4.2.

The Biosecurity Act 2015 and regulations provide specific legal requirements for state level priority weeds (A1.1). For each state level priority weed, the management objective, and specific requirements for its management (as stated in the Biosecurity Act 2015 and regulations) is included. These specific requirements include Prohibited Matter, Biosecurity Zones, Control Orders and Mandatory Measures.

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

### A1.1 State-level determined priority weeds

**State Priority Weed Objective – PREVENTION:** The following weeds are currently not found in the state, pose significant biosecurity risk and prevention is a reasonably practical objective.

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Biosecurity Act requirements &amp; Strategic Response in the region</th>
</tr>
</thead>
</table>
| All species of vascular plant - *Tracheophyta* | **Mandatory Measure (Part 2, Division 8, Clause 34, Biosecurity Regulation 2017) Duty to notify of importation of plants into the State:**

(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.

(2) The notification is to be given to the Secretary and is to be given in accordance with Part 6.

(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. Note. See http://plantnet.rbgsyd.nsw.gov.au/.

<table>
<thead>
<tr>
<th>Bridal veil creeper - <em>Asparagus declinatus</em></th>
<th><strong>Prohibited Matter (Part 4, Biosecurity Act 2015):</strong> A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubbervine – <em>Cryptostegia grandiflora</em></td>
<td><strong>Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017):</strong> A person must not import into the State or sell.</td>
</tr>
</tbody>
</table>
| Parthenium weed - *Parthenium hysterophorus* | **Prohibited Matter (Part 4, Biosecurity Act, 2015):** A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence. **Mandatory Measure (Part 2, Division 8, Clause 35, Biosecurity Regulation 2017) - Parthenium weed carriers- machinery and equipment**

(1) This clause applies to the following equipment:

(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.

(2) A person must not import into the State from Queensland any equipment to which this clause applies.
**State Priority Weed Objective – PREVENTION:**
The following weeds are currently not found in the state, pose significant biosecurity risk and prevention is a reasonably practical objective.

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Biosecurity Act requirements &amp; Strategic Response in the region</th>
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<tbody>
<tr>
<td>Anchored water hyacinth - <em>Eichhornia azurea</em></td>
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<tr>
<td>Black knapweed - <em>Centaurea xmoncktonii</em></td>
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<tr>
<td>Broomrapes - <em>Orobanche</em> spp. (all species except the native <em>O. cernua</em> var. <em>australiana</em> and <em>O. minor</em>)</td>
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<tr>
<td>Eurasian water milfoil – <em>Myriophyllum spicatum</em></td>
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<tr>
<td>Frogbit / Spongeplant - <em>Limnobium</em> spp. (all species)</td>
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<tr>
<td>Gamba Grass – <em>Andropogon gayanus</em></td>
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<tr>
<td>Hawkweed – <em>Hieracium</em> spp. (all species)</td>
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<tr>
<td>Hydrocotyl / Water pennywort – <em>Hydrocotyle ranunculoides</em></td>
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<tr>
<td>Karoo acacia - <em>Vachellia karroo</em> (syn. <em>Acacia karroo</em>)</td>
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<tr>
<td>Kochia - <em>Bassia scoparia</em> (excluding subsp. <em>trichophylla</em>)</td>
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<tr>
<td>Koster's Curse / Clidemia – <em>Clidemia hirta</em></td>
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<tr>
<td>Lagarosiphon – <em>Lagarosiphon major</em></td>
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<tr>
<td>Mexican feathergrass - <em>Nassella tenuissima</em> (syn. <em>Stipa</em>)</td>
<td></td>
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<tr>
<td>Miconia – <em>Miconia</em> species spp. (all species) <em>tenuissima</em></td>
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<tr>
<td>Mikania vine – <em>Mikania micrantha</em></td>
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<tr>
<td>Mimoso – <em>Mimosa</em> micrantha vine</td>
<td></td>
</tr>
<tr>
<td>Pond apple – <em>Annona glabra</em></td>
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<tr>
<td>Prickly acacia - <em>Vachellia nilotica</em> (syn. <em>Acacia nilotica</em>)</td>
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<tr>
<td>Siam weed – <em>Chromolaena odorata</em></td>
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<tr>
<td>Spotted knapweed - <em>Centaurea stoebe</em> subsp. <em>micranthos</em></td>
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</tr>
<tr>
<td>Water caltrop – <em>Trapa</em> spp. (all species)</td>
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<tr>
<td>Water soldier – <em>Stratiotes aloides</em></td>
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<tr>
<td>Witchweed – <em>Striga</em> species except the native <em>Striga parviflora</em></td>
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<tr>
<td>Yellow burrhead – <em>Limnocharis flav</em></td>
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</tr>
</tbody>
</table>

**Prohibited Matter (Part 4, Biosecurity Act 2015):** A person who deals with any biosecurity matter that is Prohibited Matter throughout the State is guilty of an offence.
State Priority Weed Objective – ERADICATION:
The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Biosecurity Act requirements &amp; Strategic Response in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Order Chrysanthemoides monilifera subspecies monilifera (Boneseed):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Control measures for owners and occupiers of land</strong></td>
<td>Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Boneseed Control Zone on which there is Boneseed must:</td>
</tr>
<tr>
<td>(a)</td>
<td>notify the local control authority for the area if the Boneseed is part of a new infestation on the land:</td>
</tr>
<tr>
<td>i)</td>
<td>as soon as practicable after becoming aware of the new infestation;</td>
</tr>
<tr>
<td>ii)</td>
<td>verbally or in writing;</td>
</tr>
<tr>
<td>iii)</td>
<td>giving the following:</td>
</tr>
<tr>
<td>(1)</td>
<td>the person’s full name and contact number;</td>
</tr>
<tr>
<td>(2)</td>
<td>the location of the Boneseed, including the property identification code for the land (if this is known); and</td>
</tr>
<tr>
<td>(3)</td>
<td>any other information reasonably requested by the local control authority; and</td>
</tr>
<tr>
<td>(b)</td>
<td>immediately destroy all Boneseed on the land;</td>
</tr>
<tr>
<td>(c)</td>
<td>ensure that subsequent generations of Boneseed are destroyed; and</td>
</tr>
<tr>
<td>(d)</td>
<td>the land is kept free of Boneseed.</td>
</tr>
<tr>
<td>(e)</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Control measures for persons dealing with carriers</strong></td>
<td>Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Boneseed in the Boneseed Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Boneseed on the land or in or on the carrier, must:</td>
</tr>
<tr>
<td>(a)</td>
<td>ensure that Boneseed (including any seed and propagules) is not moved from the land; and</td>
</tr>
<tr>
<td>(b)</td>
<td>immediately notify the local control authority for the area:</td>
</tr>
<tr>
<td>i)</td>
<td>as soon as practicable after becoming aware of the presence of Boneseed;</td>
</tr>
<tr>
<td>ii)</td>
<td>verbally or in writing;</td>
</tr>
<tr>
<td>iii)</td>
<td>giving the following:</td>
</tr>
<tr>
<td>(1)</td>
<td>the person’s full name and contact number;</td>
</tr>
<tr>
<td>(2)</td>
<td>the location of the Boneseed, including the property identification code for the land (if this is known); and</td>
</tr>
<tr>
<td>(3)</td>
<td>any other information reasonably requested by the local control authority.</td>
</tr>
<tr>
<td>(c)</td>
<td>The person who deals with a carrier of Boneseed does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.</td>
</tr>
</tbody>
</table>

**Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017):** A person must not import into the State or sell.
State Priority Weed Objective – ERADICATION:
The following weeds are present in limited distribution and abundance in some parts of the state. Elimination of the biosecurity risk posed by these weeds is a reasonably practical objective.

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Biosecurity Act requirements &amp; Strategic Reponse in the region</th>
</tr>
</thead>
</table>
| Parkinsonia - Parkinsonia aculeata | **Control Order - Parkinsonia aculeata (parkinsonia):**  
**Control measures for owners and occupiers of land**  
Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Parkinsonia Control Zone on which there is Parkinsonia must:  
(a) notify the local control authority for the area if the Parkinsonia is part of a new infestation of Parkinsonia on the land:  
   i) as soon as practicable after becoming aware of the new infestation;  
   ii) verbally or in writing;  
   iii) giving the following:  
      (1) the person’s full name and contact number;  
      (2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and  
      (3) any other information reasonably requested by the local control authority; and  
(b) immediately destroy all Parkinsonia on the land; and  
(c) ensure that subsequent generations of Parkinsonia are destroyed; and  
(d) the land is kept free of Parkinsonia.  
(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.  

**Control measures for persons dealing with carriers**  
Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Parkinsonia in the Parkinsonia Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Parkinsonia on the land or in or on the carrier, must:  
(a) ensure that Parkinsonia (including any seed and propagules) is not moved from the land; and  
(b) immediately notify the local control authority:  
   i) as soon as practicable after becoming aware of the presence of Parkinsonia;  
   ii) verbally or in writing;  
   iii) giving the following:  
      (1) the person’s full name and contact number;  
      (2) the location of the Parkinsonia, including the property identification code for the land (if this is known); and  
      (3) any other information reasonably requested by the local control authority.  
(c) The person who deals with a carrier of Parkinsonia does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.  

**Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017):** A person must not import into the State or sell.  
Refer A1.2 for Regional Strategic Response and Outcomes to demonstrate compliance with the GBD.
**State Priority Weed Objective – ERADICATION:**

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

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Biosecurity Act requirements &amp; Strategic Response in the region</th>
</tr>
</thead>
</table>
| Tropical soda apple - *Solanum viarum* | **Control Order - *Solanum viarum* (tropical Soda Apple):**  
**Control measures for owners and occupiers of land**  
Pursuant to section 62(1)(b) of the Act, an owner or occupier of land in the Tropical Soda Apple Control Zone on which there is Tropical Soda Apple must:  
(a) notify the local control authority for the area if the Tropical Soda Apple is part of a new infestation of Tropical Soda Apple on the land:  
   i) as soon as practicable after becoming aware of the new infestation;  
   ii) verbally or in writing;  
   iii) giving the following:  
      (1) the person's full name and contact number;  
      (2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and  
      (3) any other information reasonably requested by the local control authority; and  
(b) destroy all Tropical Soda Apple on the land, including fruit; and  
(c) ensure that subsequent generations of Tropical Soda Apple are destroyed; and  
(d) that the land is kept free of Tropical Soda Apple.  
(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.  

**Control measures for persons dealing with carriers**  
Pursuant to section 62(1)(b) of the Act, a person who deals with a carrier of Tropical Soda Apple in the Tropical Soda Apple Control Zone, in circumstances where the person knows or ought reasonably to know of the presence of Tropical Soda Apple on the land or in or on the carrier, must:  
(a) ensure that Tropical Soda Apple (including any seed and propagules) is not moved from the land; and  
(b) immediately notify the local control authority for the area:  
   i) as soon as practicable after becoming aware of the presence of Tropical Soda Apple;  
   ii) verbally or in writing;  
   iii) giving the following:  
      (1) the person's full name and contact number;  
      (2) the location of the Tropical Soda Apple, including the property identification code for the land (if this is known); and  
      iv) any other information reasonably requested by the local control authority.  
(c) The person who deals with a carrier of Tropical Soda Apple does not need to comply with (b) above if they know that notification of the infestation on the land has already been given to the local control authority for the area.  

Refer A1.2 for Regional Strategic Response and Outcomes to demonstrate compliance with the GBD.
**State Priority Weed Objective – CONTAINMENT:**
These weeds are widely distributed in some parts of the state. While broad scale elimination is not practicable, minimisation of the biosecurity risk posed by these weeds is reasonably practicable.

<table>
<thead>
<tr>
<th>Land area where requirements apply</th>
<th>Biosecurity Act requirements &amp; Strategic Response in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alligator weed - Alternanthera philoxeroides</strong></td>
<td>Biosecurity Regulation 2017 - Part 5, Division 2 (Alligator weed biosecurity zone) An owner or occupier of land in the Alligator Weed Biosecurity Zone on which there is the weed Alternanthera philoxeroides (Alligator Weed) must: (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed. Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell. Refer A1.2 for Regional Strategic Response and Outcomes to demonstrate compliance with the GBD.</td>
</tr>
<tr>
<td><strong>Bitou bush - Chrysanthemoides monilifera subsp. rotundata</strong></td>
<td>Biosecurity Regulation 2017 - Part 5, Division 3 (Bitou bush biosecurity zone) An owner or occupier of land in the bitou bush Biosecurity Zone on which there is the weed Chrysanthemoides monilifera subsp. Rotundata (Bitou Bush) must: (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed. Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell. Refer A1.2 for Regional Strategic Response and Outcomes to demonstrate compliance with the GBD.</td>
</tr>
<tr>
<td><strong>Water hyacinth - Eichhornia crassipes</strong></td>
<td>Biosecurity Regulation 2017 - Part 5, Division 4 (Water hyacinth biosecurity zone) An owner or occupier of land in the Water Hyacinth Biosecurity Zone on which there is the weed Eichhornia crassipes (Water Hyacinth) must: (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6, and (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed. Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell. Refer A1.2 for Regional Strategic Response and Outcomes to demonstrate compliance with the GBD.</td>
</tr>
</tbody>
</table>

A Biosecurity Zone, to be known as the **alligator weed biosecurity zone**, is established for all land within the state except land in the following regions:
(a) Greater Sydney,
(b) Hunter (but only in respect of land in the local government area of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens).

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.

A Biosecurity Zone, to be known as the **water hyacinth biosecurity zone**, is established for all land within the State except land in the following regions:
(a) Greater Sydney or North Coast,
(b) North West (but only land in 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).
### State Priority Weed Objective – ASSET PROTECTION:
The following weeds are Weeds of National Significance (WoNS) not already listed as a State Priority Weed or Regional Priority weed in A1.1 or A1.2.

<table>
<thead>
<tr>
<th>Species</th>
<th>Relevant Legislation &amp; Strategic Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>African boxthorn - <em>Lycium ferocissimum</em></td>
<td></td>
</tr>
<tr>
<td>Asparagus weeds - <em>Asparagus aethiopicus, A. africanus, A. asparagoides</em> Western Cape form, A. plumosus, A. scandens (Excludes A. officinalis, A. racemosus)</td>
<td></td>
</tr>
<tr>
<td>Athel pine - <em>Tamarix aphylla</em></td>
<td></td>
</tr>
<tr>
<td>Bellyache bush – <em>Jatropha gossypifolia</em></td>
<td></td>
</tr>
<tr>
<td>Blackberry - <em>Rubus fruticosus agg.</em> (Blackberry except the varietals Chester Thornless, Dirksen Thornless, Loch Ness, Silvan, Black Satin, Murrindindi, Smooth Stem, Thornfree and Chehalem)</td>
<td></td>
</tr>
<tr>
<td>Cabomba – <em>Cabomba caroliniana</em></td>
<td></td>
</tr>
<tr>
<td>Cat’s claw creeper – <em>Dolichandra unguis-cati</em></td>
<td>Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.</td>
</tr>
<tr>
<td>Hymenachne – <em>Hymenachne amplexicaulus and hybrids</em></td>
<td></td>
</tr>
<tr>
<td>Lantana - <em>Lantana camara</em></td>
<td></td>
</tr>
<tr>
<td>Madeira vine – <em>Anredera cordifolia</em></td>
<td></td>
</tr>
<tr>
<td>Opuntia - <em>Opuntia spp., Cylindropuntia spp., Austrocylindropuntia spp.</em> (Excludes O. ficus-indica) (opuntioid cacti)</td>
<td></td>
</tr>
<tr>
<td>Silver-leaf nightshade - <em>Solanum elaeagnifolium</em></td>
<td></td>
</tr>
<tr>
<td>Willows – <em>Salix spp. except S. babylonica, S. X calodendron and S. X reichardtii</em> (willows except weeping willows, pussy willow and sterile pussy willow)</td>
<td></td>
</tr>
</tbody>
</table>
### A1.2 Regional priority weeds for the Murray region:

**Regional Priority Weed Objective – PREVENTION:**
The following weeds are not found in the region, pose significant biosecurity risk and the prevention of the biosecurity risk posed by these weeds is a reasonably practicable objective.

<table>
<thead>
<tr>
<th>Outcomes to demonstrate compliance with the GBD</th>
<th>Relevant legislation and Strategic Response in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese violet – <em>Asystasia gangentica</em> subspecies micrantha</td>
<td></td>
</tr>
<tr>
<td>Heteranthera / Kidneyleaf mud plantain – <em>Heteranthera reniformis</em></td>
<td></td>
</tr>
<tr>
<td>Horsetail – <em>Equisetum</em> species</td>
<td></td>
</tr>
<tr>
<td>Senegal tea plant – <em>Gymnocoronis spilanthoide</em></td>
<td></td>
</tr>
<tr>
<td>Water lettuce - <em>Pistia stratiotes</em></td>
<td></td>
</tr>
</tbody>
</table>

- The plant is eradicated from the land and the land is kept free of the plant.
- Land managers mitigate the risk of new weeds being introduced to their land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.
- Local Control Authority is notified if the plant is found on the land.

**Regional Strategic response:**
- 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 in place.

**Parkinsonia - *Parkinsonia aculeata***

- The plant is eradicated from the land and the land is kept free of the plant.
- Land managers mitigate the risk of new weeds being introduced to their land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.
- Local Control Authority is notified if the plant is found on the land.

**Regional Strategic response:**
- 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 in place.

Refer A1.1 for the Control Order and Mandatory Measures for this species.

**Salvinia - *Salvinia molesta***

- The plant is eradicated from the land and the land is kept free of the plant.
- Land managers mitigate the risk of new weeds being introduced to their land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.
- Local Control Authority is notified if the plant is found on the land.

**Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017):** A person must not import into the State or sell.

**Regional Strategic response:**
- 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 in place.

**Tropical soda apple - *Solanum viarum***

- The plant is eradicated from the land and the land is kept free of the plant.
- Land managers mitigate the risk of new weeds being introduced to their land.
- The plant or parts of the plant are not traded, carried, grown or released into the environment.
- Local Control Authority is notified if the plant is found on the land.

**Regional Strategic response:**
- 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 in place.

Refer A1.1 for the Control Order for this species.
### Regional Priority Weed Objective – ERADICATION:
The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is reasonably practicable.

<table>
<thead>
<tr>
<th>Outcomes to demonstrate compliance with the GBD</th>
<th>Relevant legislation and Strategic Response in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alligator weed - Alternanthera philoxeroides</strong></td>
<td><strong>Regional Strategic response:</strong></td>
</tr>
<tr>
<td>• The plant is eradicated from the land and the land is kept free of the plant.</td>
<td>• Undertake high risk sites and pathways inspections</td>
</tr>
<tr>
<td>• Land managers mitigate the risk of new weeds being introduced to their land.</td>
<td>• Implement site specific biosecurity and hygiene protocols</td>
</tr>
<tr>
<td>• The plant or parts of the plant are not traded, carried, grown or released into the environment.</td>
<td>• Detailed surveillance and mapping to locate all infestations</td>
</tr>
<tr>
<td>• Local Control Authority is notified if the plant is found on the land.</td>
<td>• Monitor progress towards eradication</td>
</tr>
<tr>
<td><strong>Bitou bush - Chrysanthemoides monilifera ssp. rotundata</strong></td>
<td><strong>Regional Strategic response:</strong></td>
</tr>
<tr>
<td>• The plant is eradicated from the land and the land is kept free of the plant.</td>
<td>• Undertake high risk sites and pathways inspections</td>
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<td>• Land managers mitigate the risk of new weeds being introduced to their land.</td>
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</tr>
<tr>
<td>• Local Control Authority is notified if the plant is found on the land.</td>
<td>• Monitor progress towards eradication</td>
</tr>
<tr>
<td><strong>Coolatai grass – Hyparrhenia hirta</strong></td>
<td><strong>Regional Strategic response:</strong></td>
</tr>
<tr>
<td>• The plant is eradicated from the land and the land is kept free of the plant.</td>
<td>• Undertake high risk sites and pathways inspections</td>
</tr>
<tr>
<td>• Land managers mitigate the risk of new weeds being introduced to their land.</td>
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</tr>
<tr>
<td>• Local Control Authority is notified if the plant is found on the land.</td>
<td>• Monitor progress towards eradication</td>
</tr>
<tr>
<td><strong>Black willow – Salix nigra</strong></td>
<td><strong>Grey sallow - Salix cinerea</strong></td>
</tr>
<tr>
<td><strong>Fireweed - Senecio madagascariensis</strong></td>
<td><strong>Mesquite - Prosopis spp.</strong></td>
</tr>
<tr>
<td><strong>Flax-leaf broom - Genista linifolia</strong></td>
<td><strong>Serrated tussock - Nassella trichotoma</strong></td>
</tr>
<tr>
<td><strong>Gorse - Ulex europaeus</strong></td>
<td><strong>Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.</strong></td>
</tr>
<tr>
<td>• The plant is eradicated from the land and the land is kept free of the plant.</td>
<td><strong>Regional Strategic response:</strong></td>
</tr>
<tr>
<td>• Land managers mitigate the risk of new weeds being introduced to their land.</td>
<td>• Undertake high risk sites and pathways inspections</td>
</tr>
<tr>
<td>• The plant or parts of the plant are not traded, carried, grown or released into the environment.</td>
<td>• Implement site specific biosecurity and hygiene protocols</td>
</tr>
<tr>
<td>• Local Control Authority is notified if the plant is found on the land.</td>
<td>• Detailed surveillance and mapping to locate all infestations</td>
</tr>
<tr>
<td><strong>Water hyacinth - Eichhornia crassipes</strong></td>
<td>• Monitor progress towards eradication</td>
</tr>
<tr>
<td><strong>Regional Strategic response:</strong></td>
<td><strong>Refer A1.1 for details of the Biosecurity Zone and Mandatory Measure for this species.</strong></td>
</tr>
</tbody>
</table>
Regional Priority Weed Objective – ERADICATION (Part of Region):
The following weeds are present in limited distribution and abundance. Elimination of the biosecurity risk posed by these weeds is reasonably practicable.

**Outcomes to demonstrate compliance with the GBD** | **Biosecurity Act Requirements and Strategic Response in the region**
---|---
Hawkweeds - * Hieracium aurantiacum* (Orange hawkweed) & * Hieracium pilosella* (Mouse-eared hawkweed) | Kosciuszko NP (see state Prevention objective for further measures for all Hawkweed species)
  - The plant is eradicated from the land and the land is kept free of the plant.
  - Land managers mitigate the risk of new weeds being introduced to their land.
  - The plant or parts of the plant are not traded, carried, grown or released into the environment.
  - Local Control Authority is notified if the plant is found on the land.

Scotch broom - *Cytisus scoparius* | Whole of region excluding Snowy Valleys Council
  - The plant is eradicated from the land and the land is kept free of the plant.
  - Land managers mitigate the risk of new weeds being introduced to their land.
  - The plant or parts of the plant are not traded, carried, grown or released into the environment.
  - Local Control Authority is notified if the plant is found on the land.

Regional Priority Weed Objective – CONTAINMENT: (Whole of region)
While broad scale elimination is not practicable, minimisation of the biosecurity risk posed these weeds is reasonably practical.

**Outcomes to demonstrate compliance with the GBD** | **Biosecurity Act Requirements and Strategic Response in the region**
---|---
Chilean needlegrass - *Nassella neesiana* | Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.
Montpellier / cape broom - *Genista monspessulana* | Regional Strategic response:
  - Undertake high risk sites & pathways inspections
  - Implement site specific biosecurity and hygiene protocols
  - Detailed surveillance and mapping to locate all infestations
  - Monitor progress towards eradication
Refer to Regional Priority Weed Objective: Containment below for further measures for Scotch broom for Snowy Valleys Council.
Sagittaria – *Sagittaria platyphylla* | Regional Strategic response:
  - Undertake high risk sites & pathways inspections
  - Implement site specific biosecurity and hygiene protocols
  - Detailed surveillance and mapping to locate all infestations
  - Monitor change in current distribution
Green cestrum – *Cestrum parqui* | Prairie ground cherry - *Physalis hederifolia*
Hardhead thistle - *Rhaponticum repens* | Water poppy - *Hydrocleys nymphoides*
Ox-eye daisy - *Leucanthemum vulgare* | Yellow waterlily - *Nymphaea mexicana*
Perennial ground cherry - *Physalis longifolia* | Regional Strategic response:
  - Undertake high risk sites & pathways inspections
  - Implement site specific biosecurity and hygiene protocols
  - Detailed surveillance and mapping to locate all infestations
  - Monitor change in current distribution
Regional Priority Weed Objective – CONTAINMENT: (Part of region)
While broad scale elimination is not practicable, minimisation of the biosecurity risk posed these weeds is reasonably practicable.

<table>
<thead>
<tr>
<th>Outcomes to demonstrate compliance with the GBD</th>
<th>Biosecurity Act Requirements and Strategic Response in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotch broom - <em>Cytisus scoparius</em></td>
<td>Snowy Valleys Council</td>
</tr>
<tr>
<td>• Land managers mitigate the risk of new weeds being introduced to their land.</td>
<td>Mandatory Measure (Part 2, Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.</td>
</tr>
<tr>
<td>• The plant or parts of the plant are not traded, carried, grown or released into the environment.</td>
<td>Regional Strategic response:</td>
</tr>
<tr>
<td>• Local Control Authority is notified if the plant is found on the land.</td>
<td>• Undertake high risk sites &amp; pathways inspections</td>
</tr>
<tr>
<td></td>
<td>• Implement site specific biosecurity and hygiene protocols</td>
</tr>
<tr>
<td></td>
<td>• Detailed surveillance and mapping to locate all infestations</td>
</tr>
<tr>
<td></td>
<td>• Monitor change in current distribution</td>
</tr>
</tbody>
</table>

Refer to Regional Priority Weed Objective: Eradication for further measures for Scotch broom for all other parts of the region.
Appendix 2: Other regional weeds list

Appendix 2 lists species that are widespread in parts of the region and are of high community concern/priority to manage because of their extent and impact. These weeds are a direct threat to agricultural production and the environment and control should be undertaken to contain locally. The Regional Strategic Response includes:

- working within existing widespread weed programs, community groups and industry for strategic asset protection
- prioritising the application of the General Biosecurity Duty to assist with management of these species

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Boxthorn</td>
<td>Lycium ferocissimum</td>
</tr>
<tr>
<td>Athel pine</td>
<td>Tamarix aphylla</td>
</tr>
<tr>
<td>Bathurst burr</td>
<td>Xanthium spp.</td>
</tr>
<tr>
<td>Bear-skin fescue</td>
<td>Festuca gautieri</td>
</tr>
<tr>
<td>Bitter Stonecrop</td>
<td>Sedum acre</td>
</tr>
<tr>
<td>Blackberry</td>
<td>Rubus fruticosus (agg.)</td>
</tr>
<tr>
<td>Blue heliotrope</td>
<td>Heliotropium amplexicaule</td>
</tr>
<tr>
<td>Box Elder</td>
<td>Acer negundo</td>
</tr>
<tr>
<td>Bridal creeper</td>
<td>Asparagus asparagoides</td>
</tr>
<tr>
<td>Buffalo burr</td>
<td>Solanum rostratum</td>
</tr>
<tr>
<td>Camel thorn</td>
<td>Alhagi pseudalhagi</td>
</tr>
<tr>
<td>Cape tulips</td>
<td>Moraea flaccida and M. miniata</td>
</tr>
<tr>
<td>Columbus grass</td>
<td>Sorghum x almum</td>
</tr>
<tr>
<td>Galenia</td>
<td>Galenia pubescens</td>
</tr>
<tr>
<td>Galvanised burr</td>
<td>Sclerolaena birchii</td>
</tr>
<tr>
<td>Golden dodder</td>
<td>Cuscuta campestris</td>
</tr>
<tr>
<td>Harrisia cactus</td>
<td>Harrisia martini and H. tortuosa</td>
</tr>
<tr>
<td>Himalaya honeysuckle</td>
<td>Leycesteria formosa</td>
</tr>
<tr>
<td>Honey locust</td>
<td>Gleditsia triacanthos</td>
</tr>
<tr>
<td>Horehound</td>
<td>Marrubium vulgare</td>
</tr>
<tr>
<td>Johnson grass</td>
<td>Sorghum halepense</td>
</tr>
<tr>
<td>Khaki weed</td>
<td>Alternanthera pungens</td>
</tr>
<tr>
<td>Long leaf willow primrose</td>
<td>Ludwigia longifolia</td>
</tr>
<tr>
<td>Pampas grass</td>
<td>Cortaderia spp.</td>
</tr>
<tr>
<td>Prickly pear</td>
<td>Cylindropuntia spp.</td>
</tr>
<tr>
<td>Prickly pears</td>
<td>Opuntia spp.</td>
</tr>
<tr>
<td>Red Rice</td>
<td>Oryza rufipogon</td>
</tr>
<tr>
<td>Reed Canary Grass</td>
<td>Phalaris arundinacea</td>
</tr>
<tr>
<td>Reed Sweet-grass</td>
<td>Glyceria maxima</td>
</tr>
<tr>
<td>Rhus tree</td>
<td>Toxicodendron sucedaneum</td>
</tr>
<tr>
<td>Scotch - illyrian thistles</td>
<td>Onopordum spp.</td>
</tr>
<tr>
<td>Silk forage sorghum</td>
<td>Sorghum spp. hybrid cv. “silk”</td>
</tr>
<tr>
<td>Silverleaf nightshade</td>
<td>Solanum elaeagnifolium</td>
</tr>
<tr>
<td>Spanish heath</td>
<td>Erica lusitanica</td>
</tr>
<tr>
<td>Spiny burr grass</td>
<td>Cenchrus incertus &amp; C. longispinus</td>
</tr>
<tr>
<td>Spiny emex</td>
<td>Emex australis Steinh</td>
</tr>
<tr>
<td>St Barnaby’s thistle</td>
<td>Centaurea solstitialis</td>
</tr>
<tr>
<td>St John’s wort</td>
<td>Hypericum perforatum</td>
</tr>
<tr>
<td>Common name</td>
<td>Scientific name</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Star thistle</td>
<td>Centaurea calcitrapa</td>
</tr>
<tr>
<td>Sweet briar</td>
<td>Rosa rubiginosa</td>
</tr>
<tr>
<td>Tamarix</td>
<td>Tamarix ramosissima</td>
</tr>
<tr>
<td>Tangled Hypericum</td>
<td>Hypericum triquetrifolium</td>
</tr>
<tr>
<td>Tree of heaven</td>
<td>Ailanthus altissima</td>
</tr>
</tbody>
</table>