Murraylands and Riverland Landscape Board

# Pest plant action plan summary

2021 - 2026

LANDSCAPE SOUTH AUSTRALIA MURRAYLANDS AND RIVERLAND

# Introduction

Managing the impacts of existing and emerging pest plant species is critical for the sustainable management of agriculture, water and biodiversity. The *Pest Plant Action Plan Murraylands and Riverland region 2021-26* identifies the priority pest plant species within the region and nominates the level of control and the key management actions to be undertaken.

The plan provides guidance to landscape board staff, land managers and other relevant stakeholders in regard to where efforts are best directed and to their responsibilities for pest plant control under the *Landscape South Australia Act 2019*.

# Identifying priority pest plants

The numerous weed species in the region, the large geographical area and the limited resources available means the landscape board is not able to provide equal attention to all weeds. The pest plant action plan ensures the allocation of resources to give the best return on investment, through targeting management actions across the region on priority areas and weeds, coordination of activities and delivery of consistent messaging to communities and stakeholders.

This pest plant action plan will help to:

- provide focus and direction on management actions for specific weeds
- provide consistent messages and advice to community and stakeholders
- guide the development of the landscape board pest plant projects
- direct staff and operational resources to invest and collaborate in areas that are of the highest priority and will have the most significant impact on the environment, primary production and the community within the region.

# Priority pest plants

Staff undertook a risk assessment to determine the region's priority pest plant species (Table 1). This risk assessment was guided by the South Australian Weed Risk Management Guide, which involves:

- An assessment of the relative risk of each pest species
- As assessment of the feasibility for the pest's control and then
- Assigning a level of pest control based on the pest's assessment scores (Refer to Table 2).

This process identified 25 priority pest plant species for the region. In addition, 26 species were identified for which it was deemed that limited or no action was suitable. All weed species were assessed in the land uses they were most commonly found in across the region. As a result some species may have different risk or feasibility of control depending on the land use they occur in.

# Property management/ landholders

The landscape board recognises that people are the key to successful pest management. Therefore the aim is to continue to develop a network of enthusiastic and motivated people controlling pests at all levels of community, industry and government. These people are a valuable source of expertise with the ability to identify issues, develop projects and undertake on-ground action.

The management of priority weeds on properties is not always a simple process. It often requires a planned and consistent approach to gain the cooperation of landholders to achieve the desired on-ground actions.

Engagement with landholders, using a combination of methods, can provide a strong commitment to proposed control measures. Sustainable outcomes are achievable if the landholder is fully engaged in the proposed control programs. This can be achieved by working with and supporting landholders, voluntary remediation options, and a system of compliance. It is noted that higher level compliance activities should only be considered as an option once all reasonable and regular attempts to attain the landholder's voluntary cooperation have failed

**Table 1** - Risk matrix for priority declared weed species for the Murraylands and Riverland region.

## Feasibility of control

| Relative weed risk | High | Medium | Low |
|---|---|---|---|
| **High** | **Eradicate**<br>Buffel grass (NV) | **Contain**<br>African rue (NA) (C)<br>Branched broomrape (NV) (C)<br>Feathertop rhodes (UR)<br>Fountain grass (UR)<br>Noogoora burr (UR)<br>Prickly pear (I)<br>Yellow water lily (A)<br>Pampas grass (U) | **Manage Weed**<br>African boxthorn (UR) (NV) (I)<br>African lovegrass (NA)<br>Innocent weed (UR)<br>Prickly pear (NA) (NV)<br>Silverleaf nightshade (UR) (C) (NA)<br>Spiny rush (I)<br>Bridal creeper (NV) |
| **Medium** | **Destroy**<br>Buffel grass (UR)<br>Coolatai grass (UR)<br>Golden dodder (I)<br>Hudson pear (NV)<br>Khaki weed (I) (UR)<br>Bridal veil (NV) | **Protect Sites**<br>African lovegrass (UR)<br>Boneseed (NV)<br>Feathertop rhodes (C)<br>Fountain grass (NV)<br>Golden dodder (NV) | **Manage Sites**<br>Bathurst burr (UR) (I)<br>Caltrop (UR) (I) (C)<br>Feathertop rhodes (I)<br>Innocent weed (I)<br>Noogoora burr (I)<br>Olives (wild) (UR) (I)<br>Spiny rush (UR)<br>Three corner jack (UR) (C) (I) |
| **Low** | **Monitor**<br>African lovegrass (I)<br>Bridal veil (I)<br>Pampas grass (A) | **Limited Action**<br>Innocent weed (C)<br>Blackberry (R)<br>Dog rose (R)<br>False caper (R)<br>Gazania (R)<br>Gorse (R)<br>Horehound (R)<br>Lincoln weed (R)<br>Pampas grass (UR)<br>Salvation Jane (R)<br>Skeleton weed (R) | **Limited Action**<br>Athel pine (R)<br>Bladder campion (R)<br>Calomba daisy (R)<br>Creeping knapweed (R)<br>Cutleaf mignonette (R)<br>Giant reed (R)<br>Hoary cress (R)<br>Italian buckthorn (R)<br>One-leaf cape tulip (R)<br>Poison buttercup (R)<br>Two-leaf cape tulip (R)<br>White weeping broom (R) |

| | |
|---|---|
| **UR** | Urban and Roadsides |
| **NV** | Native vegetation |
| **R** | Management strategy across the region |
| **I** | Irrigated |
| **C** | Dryland Cropping |
| **NA** | Non arable |
| **A** | Aquatic |

**Table 2** - Control actions in order of priority

| Category | Aim | Specific actions |
|---|---|---|
| **Alert** | To prevent new pest species of significant threat from arriving and establishing in the region | • Monitor known invasion pathways<br>• Nursery inspections for new incursions<br>• Raise community awareness through training and media<br>• Data collection and storage in central database |
| **Eradicate** | To remove the pest animal and plant species from the region | • Monitor known invasion pathways<br>• Eradicate all infestations<br>• Monitor progress to eradication<br>• Raise community awareness i.e. seasonal media<br>• Data collection and storage in central database |
| **Destroy** | To significantly reduce the extent of the pest animal and plant species in the region | • Monitor known invasion pathways<br>• Destroy all infestation<br>• Run district projects for these weeds species<br>• Map and surveillance for new incursions<br>• Support and coordinate landholders to control weed on private property and roadsides<br>• Local council works staff engaged and familiar with identification and control methods<br>• Raise community awareness i.e. seasonal media<br>• Data collection and storage in central database<br>• Report new infestations section 190 |
| **Contain spread** | To prevent the ongoing spread of the pest animal and plant species in the region | • Mapping and surveillance of infested areas<br>• Control infested areas at priority sites/key assets to reduce density<br>• Run district projects for these weeds species<br>• Facilitate control of priority infestation on road reserves and private property<br>• Use roadside and property advice notices, where necessary recover costs from adjoining landholders<br>• Raise community awareness i.e. seasonal media<br>• Data collection and storage in central database |
| **Protect sites** | To prevent spread of the pest species to key assets of high economic, environmental and/or social value | • Mapping and surveillance of infested areas<br>• Control infested areas at priority sites/key assets<br>• Buffer areas around identified large infestation<br>• Run district projects for these weeds species<br>• Facilitate control of priority infestation on road reserves and private property<br>• Use roadside and property advice notices, where necessary recover costs from adjoining landholders<br>• Raise community awareness i.e. seasonal media<br>• Data collection and storage in central database |

| | | |
|---|---|---|
| **Manage weed** | To reduce the overall economic, environmental and/ or social impacts of the pest animal and plant species through targeted management | • Identify key sites / assets for management<br>• Implement control to protect key assets<br>• Run district projects for these weeds species<br>• Facilitate control of priority infestation on road reserves and private property<br>• Use roadside and property advice notices, where necessary recover costs from adjoining landholders<br>• Promote integrated weed management to landholders<br>• Educate landholders on new developments in control methods<br>• Raise community awareness i.e. seasonal media<br>• Data collection and storage in central database |
| **Manage site** | | • Promote general weed hygiene and management principles<br>• Work with key stakeholders including landholders, council and industry groups<br>• Respond to enquiries and provide advice<br>• Education and awareness campaigns about hygiene and practices for reducing spread<br>• Data collection at discretion of district officer or works program and storage in central database |
| **Monitor** | To detect any significant changes in the pest risk | • Data collection at discretion of district officer or works program and storage in central database |
| **Limited/no action** | Take no action unless local pest spreads to a land use where the pest is a higher priority | • Respond to enquiries and provide advice as required |

Image: Buffel grass *(Cenchrus ciliaris)*

# Alert weeds

Table 3 outlines weeds that were not known to occur in the region when conducting the review, but are declared in South Australia as pest plants at an alert level or have a high ranking management strategy state wide. These weeds were deemed a priority as they are a high threat, or will likely be a threat if they establish in the region.

**Table 3** - Alert weeds in the Murraylands and Riverland region

| Priority weed | Scientific name |
|---|---|
| Alkali sida | *Malvella leprosa* |
| Chilean needlegrass | *Nassella neesiana* |
| Salvinia | *Salvinia molesta* |
| Texas needlegrass | *Nassella leucotricha* |
| Water hyacinth | *Eichhornia crassipes* |

Image: Salvinia *(Salvinia molesta)*

# Low priority weed species

Weed species identified as a low priority for control within the Murraylands and Riverland region are outlined in Table 4. These weeds occur in the region, but it was deemed that minimal or no action was suitable at the time of assessment. Low priority may be due to their distribution, feasibility to control, perceived threat to the landscape or level of declaration. The assessment of these weeds was not conducted in-depth. A rapid assessment was carried out, taking into account staff technical knowledge of these species in the region and their understanding of the weed risk assessment process, having completed many thorough assessments for other species.

**Table 4** - Low priority weed species in the Murraylands and Riverland region

| Priority weed | Scientific name |
|---|---|
| Athel pine | *Tamarix aphylla* |
| Blackberry | *Rubus fruticosus* |
| Bladder campion | *Silene vulgaris* |
| Calomba daisy | *Oncosiphon suffruticosum* |
| Creeping knapweed | *Acroptilon repens* |
| Cutleaf mignonette | *Reseda lutea* |
| Dog rose | *Rosa canina* |
| False caper | *Euphorbia terracina* |
| Gazania | *Gazania spp.* |
| Giant reed | *Arando donax* |
| Gorse | *Ulex europaeus* |
| Hoary cress | *Cardaria draba* |
| Horehound | *Marrubium vulgare* |
| Italian buckthorn | *Rhamnus alaternus* |
| Lincoln weed | *Diplotaxis tenuifolia* |
| One-leaf cape tulip | *Moraea flaccida* |
| Poison buttercup | *Ranunculus sceleratus* |
| Salvation Jane | *Echium plantagineum* |
| Skeleton weed | *Chondrilla juncea* |
| Two-leaf cape tulip | *Moraea miniata* |
| White weeping broom | *Retama raetam* |

# Pest Control on roadside reserves

Road reserves are a recognised pathway for the introduction and movement of declared plants. It is a priority of the Murraylands and Riverland Landscape Board to stop the introduction and minimise the impact of established weeds by managing road reserves through a systematic inspection and strategic control program.

Under section 192(8) of the Act, the landscape board is responsible for destroying or controlling declared pest animals and plants on road reserves within the region. In addition, the landscape board may recover the cost of controlling pests on road reserves from each adjoining landholder as per Section 194 of the Act.

To maintain an adequate level of weed control across the region's vast network of road reserves while limiting potential financial impacts on adjoining landholders, the board will focus weed control on species with the most significant potential to spread and cause adverse impacts. To guide this, if the weed species is located within a road reserve, the following principles apply:

- weed species identified as **'eradicate'** or **'destroy'** will be targeted by a District Officer (or contractor).
- weed species identified as **'contain spread'**, **'protect sites'** or **'manage weed'** may be targeted for control through an *Annual Roadside Control program* with the adjoining landholder allowed to carry out the works in the first instance. Staff or a contractor may undertake control works if the landholder advises they do not wish to (or cannot) via written notification or fails to undertake control measures by the date given on the notification letter. The adjoining landholder may be charged for this work if they do not wish to be involved. This will be dependent on whether the specific program is funded or not.
- weed species identified as **'manage site'**, **'monitor'** or 'limited action' may be targeted for control when there is evidence that the weed is causing adverse impacts due to the road reserve infestation. These weeds may also be managed as above through an *Annual Roadside Control program.*

It is important to note that the recovery of pest control costs will be considered case-by-case, and District Officer discretion may be exercised.

# Annual roadside control program

The landscape board will develop an *Annual Roadside Control program* for the region to focus on priority weed species. Priority areas, roadsides and weed species for control will be identified. The landscape board will communicate with landholders adjoining these roadsides about the control program, timing and control requirements. The landscape board will, where practicable, endeavour to provide an opportunity for landholders to undertake roadside weed control before coordinating control works (and therefore avoid being charged a fee).

In some cases, rather that pass on costs to the adjacent landholder, District Officer discretion may be used where the presence of plants may be minor, or there may be wider benefits for district staff to conduct control. The landscape board may also undertake projects on roadsides using internal resources of staff and equipment or the engagement of contractors, which will be dependent upon the specific task and funding availability.

The physical control of infestations of declared weeds on roadside reserves can be carried out by the adjoining landholder independent of an *Annual Roadside Control Program*. Any landowner who intends to undertake their own control of declared pests on road reserves must obtain authority from their local council and comply with any conditions imposed as part of that authorisation. Note that under section 221 of the *Local Government Act 1999*, it is illegal for landowners to interfere with or remove vegetation without such authorisation. The landholder should notify their local landscape board District Officer of any control work they are planning on a road reserve.

## More information

landscape.sa.gov.au/mr

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