



Government  
of South Australia

## Declared Plant Policy

*This policy relates to natural resources management under section 9(1)(d) of the Landscape South Australia Act 2019 (the Act), enabling co-ordinated implementation and promotion of sound management programs and practices for the use, development or protection of natural resources of the State. Specifically, this policy provides guidance on the use and management of natural resources relating to the prevention or control of impacts caused by pest species of plants that may have an adverse effect on the environment, primary production or the community, as per object s7(1)(f) of the Act.*

### Chilean needlegrass (*Nassella neesiana*)

Chilean needlegrass is an unpalatable perennial grass that vegetatively resembles some native *Austrostipa* species and invades unsown pastures or native vegetation with a grassy understorey. It is localised in South Australia, with the largest infestations occurring around Gawler and Wirrina.

The closely related Texas needlegrass, *Nassella leucotricha*, is the subject of a separate policy.

### Management Plan for Chilean Needlegrass

#### Outcomes

- Pasture and native vegetation protected from degradation by unpalatable invasive grasses.

#### Objectives

- Contain and control existing infestations.
- Prevent the establishment of new infestations.

#### Best Practice Implementation

- Containment and destruction of known infestations.
- Inspection for new infestations as part of routine inspection by regional landscape boards and Green Adelaide, particularly in high risk regions containing or adjacent to existing infestations
- Raise awareness of land owners of the identification, impact, and best practice management.

## Chilean needlegrass policy

### Regional Implementation

Refer to regional management plans for further details.

Region	Actions
Alinytjara Wilurara	Prevent entry or sale; destroy if detected
Eyre Peninsula	Prevent entry or sale; destroy if detected
Green Adelaide	Contain and destroy infestations
Hills and Fleurieu	Contain and destroy infestations
Kangaroo Island	Prevent entry or sale; destroy if detected
Limestone Coast	Prevent entry or sale; destroy if detected
Murraylands and Riverland	Prevent entry or sale; destroy if detected
Northern and Yorke	Prevent entry or sale; destroy if detected
South Australian Arid Lands	Prevent entry or sale; destroy if detected

### Declaration

To implement this policy, Chilean needlegrass is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia so that movement of contaminated fodder or machinery can be prevented. Its entry to the State, movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. In the Green Adelaide, Hills and Fleurieu, and Murraylands and Riverland regions the movement of Chilean needlegrass within and between properties is also prohibited.

Notification of infestations is necessary to ensure these are destroyed. In all regions, land owners are required to destroy Chilean needlegrass plants growing on their land. Landscape boards and Green Adelaide are required to destroy plants on road reserves in their regions, and may recover costs from the adjoining land owners.

Chilean needlegrass is declared in category 1 under the Act, for the purpose of setting maximum penalties and for other purposes. Any permit to allow its entry to the State, road transport, movement or sale can only be issued by the Chief Executive of the Department for Environment and Water (DEW) or their delegate pursuant to section 197.

Under the *Landscape South Australia (General) Regulations 2020*, Regulation 27 specifies the conditions under which a person is exempt from the operation of section 186 and may transport wool, grain or other produce or goods carrying Chilean needlegrass on public roads, within or between properties, or bring them into the State. Regulation 28 specifies conditions under which a person is exempt from the operation of section 188(2) and may sell wool, grain or other produce or goods carrying Chilean needlegrass. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive, DEW.

The following sections of the Act apply to Chilean needlegrass throughout each of the regions noted below:

## Chilean needlegrass policy

Sections of Act	Region									
	AW	EP	GA	HF	KI	LC	MR	NY	SAAL	
186(1) Prohibiting entry to area	X	X	X	X	X	X	X	X	X	
186(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X	X	
186(3) Prohibiting movement within and between properties			X	X			X			
188(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X	X	
188(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X	X	
190 Requiring notification of presence	X	X	X	X	X	X	X	X	X	
192(1) Land owners to destroy the plant on their properties	X	X	X	X	X	X	X	X	X	
192(2) Land owners to control the plant on their properties										
194 Recovery of control costs on adjoining road reserves	X	X	X	X	X	X	X	X	X	

### Review

This policy is to be reviewed by 2025, or in the event of any change in the status of Chilean needlegrass as a Weed of National Significance. Success will be measured by the number of new infestations recorded by regional landscape boards.

### Weed Risk

#### Invasiveness

Chilean needlegrass spreads by seeds, which are produced abundantly in stalked panicles and become attached to animals, vehicles and clothing. They could also be dispersed in contaminated produce, notably hay, or be blown by the wind. Chilean needle grass is more likely to become established in degraded pasture or native grass situations, therefore maintaining a resilient system will reduce likelihood of establishment.

#### Impacts

Chilean needlegrass forms dense infestations in pasture, native grasslands and woodlands where it can exclude desirable species. It has low feed value to stock, and is not palatable so tends to be allowed to increase as long as more palatable pasture species are present.

#### Potential distribution

Climate matching suggests that a large part of the southern agricultural regions of South Australia is suitable habitat for Chilean needlegrass, which is now scattered across similar habitats in western Victoria. It would grow in grasslands, perennial pastures and grassy woodlands.

### Feasibility of Containment

#### Control costs

Permits have been issued by the Australian Pesticides and Veterinary Medicines Authority for the use of glyphosate, fluazifop and flupropanate for the destruction of Chilean needlegrass incursions. Herbicide control is labour intensive, as these are non-selective controls and it is necessary to repeat the treatment over several years and search for

## Chilean needlegrass policy

remaining plants. Control depends on management of infested properties to prevent spread and replace with desirable vegetation over a long period.

### Persistence

Eradication of an incursion is slowed by the long life of seeds in the soil and the difficulty of detecting all needlegrass plants among other grasses. The evolution of herbicide resistance is a high potential risk for this species.

### Current distribution

Chilean needlegrass is known to be established at several sites north and south of Adelaide with the largest at Wirrina on the Fleurieu Peninsula. Previous records exist from the Northern and Yorke, and South East regions but no current infestations have been located there. It is naturalised in Victoria and New South Wales.

### **State Level Risk Assessment**

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment scores by land use:

<b>Land use</b>	<b>Weed Risk</b>	<b>Feasibility of control</b>	<b>Response at State Level</b>
Grazing - southern	high 177	very high 14	destroy infestations alert
Native vegetation	medium 79	very high 14	contain spread alert

### **Considerations**

Chilean needlegrass is one of the Weeds of National Significance, which are subject to a uniform prohibition on sale in all jurisdictions. In line with the national strategy on Chilean needlegrass, sale of the plant is prohibited in South Australia as in other jurisdictions. There is no demand for this plant, and prohibiting its sale it does not inconvenience the nursery trade.

Risk assessment indicates destroying infestations as the management action; this is implemented by preventing its further entry or spread in South Australia. In the Green Adelaide and Hills and Fleurieu regions where there are established infestations, the action is containment with the aim of destruction where feasible.

### **Synonymy**

*Nassella neesiana* (Trin. & Rupr.) Barkworth, Taxon 39: 611 (1990).

Basionym:

*Stipa neesiana* Trin. & Rupr., Sp. Gram. Stipac. 27 (1842).

Taxonomic synonyms:

*Stipa contracta* Phil., Linnaea 33: 285 (1864)

*Stipa eminens* Nees, Fl. Bras. Enum. Pl. 2: 374. (1829)

*Stipa setigera* J.Presl, Reliq. Haenk. 1: 226 (1831)

*Stipa trachysperma* Phil., Linnaea 33: 284 (1864)

## References

Agriculture & Resource Management Council of Australia & New Zealand Australia & New Zealand Environment & Conservation Council and Forestry Ministers (2001) 'Weeds of National Significance Chilean Needlegrass (*Nassella neesiana*) Strategic Plan.' (National Weeds Strategy Executive Committee: Launceston).

National Chilean Needlegrass Taskforce (2007) 'Chilean Needlegrass National Best Practice Manual' (Department of Primary Industries, Victoria).

Hon David Speirs MP  
**Minister for Environment and Water**

Date: 28 March 2021