



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.

### poison buttercup (*Ranunculus sceleratus*)

Poison buttercup is an annual herb growing in marshes and poorly-drained perennial pastures. Native to Europe, it has now become widespread in temperate Asia, North America and Australia. It is currently naturalised only at one site in South Australia.

#### Management Plan for Poison Buttercup

##### Outcomes

- Protect streams and wetland pastures from degradation by weeds.

##### Objectives

- Prevent further incursions of poison buttercup in South Australia.
- Prevent any extension of the existing infestation of poison buttercup at Chowilla further downstream in the Riverland.

##### Best Practice Implementation

- Containment of the infestation at Chowilla.
- Inspection for infestations as part of routine inspection by regional landscape boards and Green Adelaide.
- Containment and destruction of any other infestations found.
- Regional landscape boards and Green Adelaide to inspect waterways and wetlands for presence of aquatic weeds.

##### Regional Implementation

Refer to regional management plans for further details.

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

## Declaration

To implement this policy, poison buttercup is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its entry to South Australia, movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. Notification of infestations is necessary to ensure these are destroyed. Land owners are required to destroy any poison buttercup 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.

Poison buttercup 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, road transport or sale can only be issued by the Chief Executive of the Department for Environment and Water 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 poison buttercup on public roads, 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 poison buttercup. 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 poison buttercup throughout each of the regions noted below:

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	X
186(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X	X	X
188(1) Prohibiting sale of the plant	X	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	X
190 Requiring notification of presence	X	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	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	X

## Review

This policy is to be reviewed by 2025, or in the event of poison buttercup becoming established as a weed in South Australia.

## Weed Risk

### Invasiveness

Poison buttercup disperses by seeds, which are small, very numerous and fall directly into the mud around the parent plant. They are likely to move downstream in running water and over longer distances in mud carried by water birds. Seeds carried in mud readily adhere to vehicles.

It germinates at any time of the year when water is available, and can have more than one generation per year under favourable conditions. Plants establish in open conditions such as bare mud or disturbed pasture.

### Impacts

Poison buttercup is the most toxic *Ranunculus* species growing in Australia. It contains the glycoside ranunculin, which is converted into a highly toxic irritant protoanemonin on being chewed; it has often caused stock deaths overseas but there are few reports in Australia. Cattle are the most frequent victims. If established in large numbers it would be likely to have a serious adverse effect on the use of wetland pastures.

### Potential distribution

Poison buttercup is confined to freshwater wetlands and high rainfall areas. It is most likely to establish along the River Murray, in the lower Limestone Coast and the Hills and Fleurieu regions.

## Feasibility of Containment

### Control costs

Annual treatments with glyphosate eliminated the Murray Bridge infestation in about five years, but a further five years should be allowed for follow-ups to ensure the seed bank of a large infestation is exhausted.

### Persistence

Experience at Murray Bridge suggests that the seed of poison buttercup does not persist for more than a few years in soil, and an infestation can be eradicated in less than a decade by spraying the weed whenever it appears. Although it is not cultivated, there is a likelihood of repeated re-introductions from interstate on vehicles.

### Current distribution

Poison buttercup is established in the Chowilla area of South Australia, but there are older herbarium records from Wall Flat and Paiwalla Swamp on the River Murray, and from Rule Swamp on the Victorian border in the Limestone Coast region. It is widespread in New South Wales and Victoria, and also naturalised in south-east Queensland, Western Australia and

Tasmania. Due to widespread distribution in other States it is likely poison buttercup will be introduced repeatedly into South Australia.

### 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:

Land use	Weed Risk	Feasibility of control	Response at State Level
Grazing - southern	low 34	very high 4	monitor
Irrigated pastures	high 101	very high 4	destroy infestations
Aquatic	low 38	very high 4	monitor

### Considerations

Risk assessment indicates monitoring as a management action to detect and destroy any further incursions of poison buttercup in the State.

Poison buttercup was first recorded in South Australia in 1989 from one small area near Murray Bridge where it was eradicated in the 1990s. The Wall Flat, Paiwalla Swamp and Rule Swamp records date from the same period and it is not known whether it has persisted at these localities.

A larger infestation was found in 2003 on the Chowilla floodplain, a Ramsar wetland where it grows on soil disturbed and manured by feral pigs. The infested area has been stable at about 6 ha since that time, and its eradication is contingent on control of the pigs.

### Synonymy

*Ranunculus sceleratus* L., Sp.PI. 551 (1753)

Nomenclatural synonym:

*Batrachium sceleratum* (L.) Th.Fr. ex A.Pihl, Bot. Not.1893: 5 (1893)

Taxonomic synonyms:

*Ranunculus holophyllus* Hance, Ann. Sci. Nat., Bot., ser. 4, 5: 220 (1861)

*Ranunculus oryzetorum* Bunge, Enum. Pl. China Bor. 2 (1833)

*Adonis palustris* Raeusch., Nomencl. Bot. [Raeusch.] ed. 3, 162 (1797)

*Hecatonia palustris* Lour., Fl. Cochinch. 1: 303 (1790)

Other common names include celery buttercup, celery-leaved buttercup, cursed buttercup and shi long rui.

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

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