



## 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.*

### cabomba (*Cabomba caroliniana*)

Cabomba is a submerged aquatic flowering plant with finely divided leaves, used in ornamental freshwater aquaria. It is not naturalised in South Australia.

#### Management Plan for Cabomba

##### Outcomes

- Maintain waterways free of blockages and keep streams and wetlands free of major weed threats.

##### Objectives

- Prevent introduction of cabomba to waterways and ponds.

##### Best Practice Implementation

- Regional landscape boards and Green Adelaide to inspect premises such as pet shops, aquarium supplies and garden shops for cabomba.
- Regional landscape boards and Green Adelaide to inspect waterways and wetlands for presence of aquatic weeds
- Any infestation of cabomba discovered to be treated as an incursion and destroyed.

##### 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	Prevent entry or sale; destroy if detected
Hills and Fleurieu	Prevent entry or sale; destroy if detected
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; surveillance; 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, cabomba 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 cabomba plants growing on their properties.

Cabomba 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, sale or road transport 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 cabomba 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 cabomba. 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 cabomba 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
186(2) Prohibiting movement on public roads	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
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									

## Review

This policy is to be reviewed by 2025 or in the event of cabomba being found established in South Australia.

## Weed Risk

### Invasiveness

Movement of cabomba depends on human intervention, especially by the dumping of aquarium contents into water bodies. Its high growth rate under ideal conditions would allow it to rapidly increase during suitable conditions and spread downstream or through a water body by movement of fragments.

### Impacts

Where it has established in other States, cabomba competes with native submerged plants and like all submerged vegetation can become a hazard to boats and water skiers.

### Potential distribution

Cabomba requires fresh, clear, slightly acidic water for growth. Such conditions are found in some streams and ponds in the southern part of the State, and may occur in the River Murray in some years. Cabomba could potentially establish at these sites.

## **Feasibility of Containment**

### Control costs

Submerged aquatic weeds are difficult to eradicate from large, open water bodies where herbicide options are expensive, limited and can pose risks of off-target damage. Underwater vegetation may be harvested and used as compost, but this removal method impacts equally on native and introduced species.

### Persistence

Regrowth would occur after control by cutting or dredging. However, cabomba may have no way of surviving unfavourable seasons in South Australia, and might persist in the long term only if continually re-introduced from cultivation.

### Current distribution

Cabomba is not naturalised in South Australia, but is still grown in aquaria and has become naturalised in water bodies in NSW, Victoria, Queensland and the Northern Territory.

## **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>
Aquatic	low 35	very high 2	monitor

## **Considerations**

Cabomba 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 cabomba, sale of the plant is prohibited in South Australia. As it is a potential invader of some streams where its weed risk is much higher than it is for the State as a whole, regional landscape boards also need the power to implement eradication when cabomba is detected.

As the River Murray is seen as a habitat where cabomba could become naturalised, in the Murraylands and Riverland region there is surveillance of key riparian zones and irrigation

areas, regular inspection of the river corridor and backwaters, with destruction of any infestations found.

### Synonymy

*Cabomba caroliniana* A.Gray, Ann. Lyceum Nat. Hist. New York 4: 47 (1837).

Nomenclatural synonym:

*Nectris caroliniana* (A. Gray) Steud., Nomencl. Bot. ed. 2, 2: 188. (1841).

Taxonomic synonym:

*Cabomba aquatica* DC., Syst. Nat. [Candolle] 2: 36 (1821)

Other common names include Carolina watershield, fanwort, fish grass, Washington grass, watershield, zhu jie, shui song

### References

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

Hon David Speirs MP

**Minister for Environment and Water**

Date: 28 March 2021