Declared Plant Policy

Government of South Australia

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.*

lagarosiphon (*Lagarosiphon major*)

Lagarosiphon is a submerged aquatic plant similar to elodea and leafy elodea. It is only known as an uncommon cultivated aquarium plant in South Australia.

Management Plan for Lagarosiphon

Outcomes

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

Objectives

- Prevent introduction of lagarosiphon to waterways and wetlands.
- Destroy any infestations as they occur.

Best Practice Implementation

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

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; 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, lagarosiphon 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 lagarosiphon plants growing on their properties.

Lagarosiphon 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 lagarosiphon 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 lagarosiphon. 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 lagarosiphon throughout each of the regions noted below:

Region / Sections of Act	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 lagarosiphon being found in South Australia.

Weed Risk

Invasiveness

Introduction of lagarosiphon to a water body depends on human intervention, and is most likely to occur by the dumping of aquarium contents. Its high growth rate under ideal conditions would allow it to rapidly increase. It is not known to produce seed in Australia.

It spreads vegetatively when water flow moves stem fragments long distances to take root and form new infestations elsewhere. Fragments can be transported on boats or flood debris.

Impacts

Lagarosiphon is a submerged plant that grows rapidly over summer from rhizomes anchored in the mud. It can form dense mats just below the surface of a water body that reduce light penetrating into the water and displace native aquatic vegetation, and may deplete oxygen in the water when they decay.

Infestations can reduce the potential of waterways for recreational uses such as fishing and boating.

Potential distribution

Lagarosiphon may be able to grow in ponds and dams in South Australia and parts of the River Murray system.

Feasibility of Containment

Control costs

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

Persistence

Regrowth would occur after control by cutting or dredging, and may be exacerbated by re-introduction from cultivation.

Current distribution

Not known to be present in 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
Aquatic	medium 51	very high 1	contain spread, alert

Considerations

Native to southern Africa, lagarosiphon was introduced to Australia as an aquarium plant. Wild incursions have been recorded in New South Wales and Victoria. It has become a major weed in New Zealand. All States and Territories have agreed on its uniform national declaration through the Australian Weeds Committee.

Due to its medium weed risk, apparent absence from the State and very high feasibility of control, lagarosiphon is regarded as a State Alert Weed and a high priority surveillance target to increase the likelihood of early detection.

Synonymy

Lagarosiphon major (Ridl.) Moss, Trans. Roy. Soc. South Africa 16(2): 193. 1928

Basionym: *Lagarosiphon muscoides* Harv. var. *major* Ridl., J. Linn. Soc., Bot. 22(145): 233. 1886

Elodea crispa and *Elodea major* are names that have never been formally published but have been used in the horticultural trade.

Other common names include African elodea, curly water thyme, oxygen weed and coarse oxygen weed.

Hon David Speirs MP
Minister for Environment and Water

Date: 28 March 2021