



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.

athel pine (*Tamarix aphylla*)

Athel pine is one of the tamarisks, trees adapted to dry saline habitats where water is available in the deep subsoil. It has been widely planted in South Australia and is now beginning to impact on some watercourses in the pastoral zone.

Management Plan for Athel Pine

Outcomes

- Maintain integrity of watercourses and native vegetation by preventing invasion by athel pine.

Objectives

- To control and contain athel pine infestations in accordance with Regional Management Plans.
- Prevent further planting of athel pine in high risk sites.
- Remove existing athel pines from high risk sites as prioritised at regional level.
- Prevent the spread of athel pine into uninfested areas.
- Prevent the reinfestation of areas cleared of athel pine

Best Practice Implementation

- Extension to increase awareness of the environmental damage caused by athel pine.
- Regional landscape boards in the pastoral zone of South Australia to locate and map infestations of athel pine.
- Regional landscape boards in the pastoral zone of South Australia to enforce control where necessary to protect riparian habitats
- Regional landscape boards to develop plans to control or contain priority infestations, and to implement this plan progressively.
- To assist local control programs, the sale and movement of athel pine is prohibited.

Regional Implementation

Refer to regional management plans for further details.

Region	Actions
Alinytjara Wilurara	Contain spread
Eyre Peninsula	Monitor
Green Adelaide	Contain spread
Hills and Fleurieu	Contain spread
Kangaroo Island	Monitor
Limestone Coast	Monitor
Murraylands and Riverland	Protect sites
Northern and Yorke	Monitor
South Australian Arid Lands	Protect sites

Declaration

To implement this policy, athel pine is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant is prohibited. It is declared for control within 100 metres of any watercourse; regional landscape boards and Green Adelaide are required to control plants within 100 metres of watercourses on road reserves and may recover costs from the adjoining land owners.

Athel pine is declared in category 3 under the Act for the purpose of setting maximum penalties under and for other purposes. Any permit to allow its sale or road transport can only be issued by the regional landscape board or Green Adelaide 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 athel pine on public roads. 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 athel pine. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive of the Department for Environment and Water.

The following sections of the Act apply to athel pine 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									
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									
192(1) Land owners to destroy the plant on their properties									
192(2) Land owners to control the plant on their properties	X	X	X	X	X	X	X	X	X
194 Recovery of control costs on adjoining road reserves	X	X	X	X	X	X	X	X	X

Sections 192(2) and 194 apply only on land within 100 metres of a watercourse.

Review

This policy is to be reviewed by 2025 or in the event of a change in any regional management plan for athel pine.

Weed Risk

Invasiveness

Athel pine originated in the arid zone of western Asia and northern Africa, and has been widely planted throughout the world as a shade and shelter tree and also for revegetation in arid or saline environments

Athel pine has become a problem in the arid zone of Australia where it can rapidly spread along streams, replacing native vegetation and increasing surface soil salinity.

Dispersal occurs by seed, which is produced in large numbers in favourable years but is very short-lived in the soil. A large infestation can develop suddenly when seed production coincides with a flood, which disperses the seed along watercourses and also provides a suitable habitat for establishment. Infestations of athel pine commonly expand by suckering from surface roots.

Impacts

Athel pines form a dense canopy that provides inferior habitat for wildlife and inhibits the regeneration of native plants.

Like other *Tamarix* species, athel pines have deep roots that tap soil water and can lower the water table to the extent of causing small springs to dry up. To the extent that this water is saline, they extract the salt and excrete it through glands on the leaves. This process tends to increase the salinity of the surface soil and eliminate less salt-tolerant plants from the site.

In addition to displacing native vegetation, infestations along watercourses trap sediments, which reduce channel capacity as they accumulate. In time, the infestations can change the direction of streams and modify riparian landforms.

Potential distribution

Athel pine is drought resistant and is well suited to arid and semi-arid rangelands. It is tolerant of saline and alkaline soils and, although it flourishes best in and around rivers, is not restricted to the riparian environment. Based on climatic criteria, athel pine could potentially infest watercourses throughout most of inland South Australia.

Feasibility of Containment

Control costs

Heavy infestations of mature athel pine can be controlled by combining mechanical and chemical control. Bulldozers can be used to remove trees and roots in the case of large infestations. This work is expensive when infestations are in remote areas.

Chemical control can be used over larger areas and where there is a risk of erosion due to mechanical removal. Application of herbicide to freshly cut stumps or to frilled stems frilling immediate application is effective.

Seedlings can be removed by hand or sprayed with an appropriate herbicide.

Persistence

Athel pine is drought resistant and is well suited to arid and semi-arid rangelands. It is tolerant of saline and alkaline soils. It has an extensive and very deep root system that may penetrate as far as 50 m underground in search of water. Mature athel pines commonly reproduce vegetatively by suckering, as well as producing copious amounts of seed.

Current distribution

The main naturalised infestations of athel pine are on creek lines, lakes and bore drains in the pastoral zone, from around 33°S on the Barrier Highway north to the Northern Territory border and the Anangu Pitjanjatjara Yankunytjatjara lands. Outlying infestations have been found south of this line at Hypurna Station and the Pike River Complex in the Riverland. Athel pine occurs as planted trees in the other regions.

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 - rangeland	low 31	very high 2	monitor
Native vegetation	high 157	very high 2	destroy infestations

Considerations

Athel pine 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 athel pine, sale of the plant is prohibited in South Australia as in other jurisdictions. However, it has been widely planted as an amenity tree in South Australia, from suburban Adelaide throughout the agricultural zone and around homesteads in the northern pastoral zone.

It was first proclaimed by the Northern Territory Government when damage to river red gum communities along the Finke River was recognised.

Risk assessment indicates management actions at State level of monitoring in rangeland grazing lands, and destroying infestations of the weed in native vegetation. However, the actions at regional level vary according to the presence of athel pine as a naturalised species and the occurrence of habitats vulnerable to invasion. The Murraylands and Riverland, and South Australian Arid Lands regions aim to protect sites. The Alinytjara Wilurara region also has vulnerable habitats, and aims to contain spread in the Anangu Pitjantjatjara Yankunytjatjara lands, and control any infestations elsewhere. In the Eyre Peninsula, Northern and Yorke, and Kangaroo Island regions, athel pine is monitored. The Adelaide,

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Limestone Coast, and Hills and Fleurieu regions have no wild infestations but aim to control any spread from planted trees. Kangaroo Island monitors any athel pines and aims to remove all *Tamarix* species planted on public lands to prevent any chance of escapes.

Synonymy

Tamarix aphylla (L.)H.Karst, Deut. Fl. 641 (1883).

Nomenclatural synonym: *Thuja aphylla* L., Cent. Pl. 1 32 (1755)

Taxonomic synonyms: *Tamarix articulata* Vahl, Symb. Bot. 2: 48, t. 32. (1791).
Tamarix orientalis Forssk., Fl. Aegypt.-Arab. 206 (1775).

References

National Athel Pine Management Committee (2008) *Athel Pine National Best Practice Manual*. (Northern Territory Government: Palmerston, NT).

Hon David Speirs MP
Minister for Environment and Water

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