

Griffith City Council – Noxious Weed – Management Plan



Sagittaria (*Sagittaria platyphylla*)

Weed of National Significance



Class 4
Locally
Controlled Weed



This plan is published in accordance with Order 30 (*made under the Noxious Weeds Act 1993*) and outlines requirements to control class (4) weeds by private occupiers of land in the Griffith City Council area.

Plan period:

This plan commences on 30th January 2015. Council reserves the right to review, revoke, vary or amend this plan at any time by publication of a revised control plan.

Obligations of landholders (Section 12, Noxious Weeds Act 1993).

Private occupiers of land must control noxious weeds on land.

An occupier (*other than a public authority or a local control authority*) of land to which a weed control order applies must control noxious weeds on the land as required under the order.

Note: If an occupier fails to comply with obligations under a weed control order, those obligations may be enforced against the owner of the land as well as the occupier by a weed control notice issued under section 18.

Prescribed Control Measures as per Weed Control Order no. 30 made under the Noxious Weeds Act 1993

Locally Controlled Weed – **“The plant must not be sold, propagated or knowingly distributed”.**

- The weed must be prevented from growing within 20 metres of a property boundary or watercourse.

Treat all weeds prior to seed set by:

- Application of a registered herbicide as per label.
- Or by physical or mechanical removal.

Individual Management Plans
drawn up in consultation with
landholders on request.

Important: Always read herbicide label prior to use. **Mixing rates should be adhered to**; applying extra chemical does not enhance the chemicals' ability to control weeds, but could contribute to "herbicide resistance".

Further assistance and information can be obtained by contacting G.C.C. on (02) 6962 3933.

Correspondence contact

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Plan Authorisation

Signed:

Position: *General Manager*

Date Authorised: *28/1/2015.*

Sagittaria – *Sagittaria platyphylla*

Non-chemical options: Isolated plants can be manually removed.

| Chemical and Concentration | Rate | Comments |
|----------------------------|--|---|
| PER11856 | Glyphosate 360 g/L Only products registered for aquatic use | 10 L per 100 L of water |
| | | Spot spray application. Direct spray onto weed mats in infested areas. Do not broadcast spray over the water. |
| PER14549 | Glyphosate 360 g/L Only products registered for aquatic use | 10 L per 100 L of water |
| | | Spot spray application. Direct spray onto weed mats in infested areas. Do not broadcast spray over the water. |

Sagittaria: is a native of North and South America and was introduced into Australia in 1959, it has since spread to many irrigation areas including the Murray Irrigation District and the Murrumbidgee Irrigation area. It is capable of aggressive growth and rapid spread, and invades irrigation channels, drains, creeks, rivers, lagoons, dams and wetlands. The weed favours slow moving or static shallow water.

Impact: In natural systems the vigorous, choking habit of *Sagittaria* threatens native aquatic flora and fauna. Dense infestations restrict water flow and can substantially alter the flow regime of catchments and waterways affecting biodiversity and stream health.

Description: *Sagittaria* is an emergent aquatic plant that belongs to the Alismataceae family, and is a perennial herb and can grow up to 150 cm tall. It has oval/linear shaped leaf blades with pointed tips, up to 25 cm long and 10 cm wide at the top of each stem (leaf stalk). It also has long narrow strap-like submerged leaves up to 50 cm long. Stems are triangular in cross-section.

Flowers: Occur in whorls or coils. Male flowers are 3 cm across with three white petals and yellow centres. Female flowers have no petals, resembling flattened green berries. Flowers appear below the height of the leaves during spring and autumn.

Fruit/Seeds: *Sagittaria* seeds occur in clusters, consisting of flattened and winged segments, 0.15-0.3 cm long with one seed in each segment.

Control Options: A number of herbicides are registered to control arrowhead. Recent developments in applied steam technology may provide an alternative to herbicide control.

Physical Removal: Involves excavation with machinery or manual digging by hand. Physical removal allows water movement to be restored quickly in waterways blocked by infestations. It is also a technique used in areas where herbicide use is inappropriate, such as near sensitive waterways or irrigation channels under continual use.

Appropriate Hygiene: Containment measures must be applied during manual removal to ensure plant fragments do not float downstream and establish elsewhere. It is also important when excavating to ensure the root and rhizome fragments in the soil are removed to avoid future germination.

Isolated Infestations: In new and isolated infestations where eradication is possible mechanical and manual removal should be considered. By removing all viable plant material and follow up with removal of regrowth, eradication is possible.



Images courtesy of the NSW DPI

Above: Main *Sagittaria* in waterway. **Inset:** Flower head.