

## Plant Tips

### Plants of Conservation Significance

VULNERABLE	ENDANGERED	RARE
<i>Acacia attenuata</i> <i>Maundia triglochinosides</i>	<i>Lilaeopsis brisbanica</i> <i>Phaius australis</i> <i>P. bernaysii</i> <i>P. tancarvilleae</i>	<i>Aponogeton elongatus ssp. fluitans</i>

### Rehabilitating the Original Plant Community

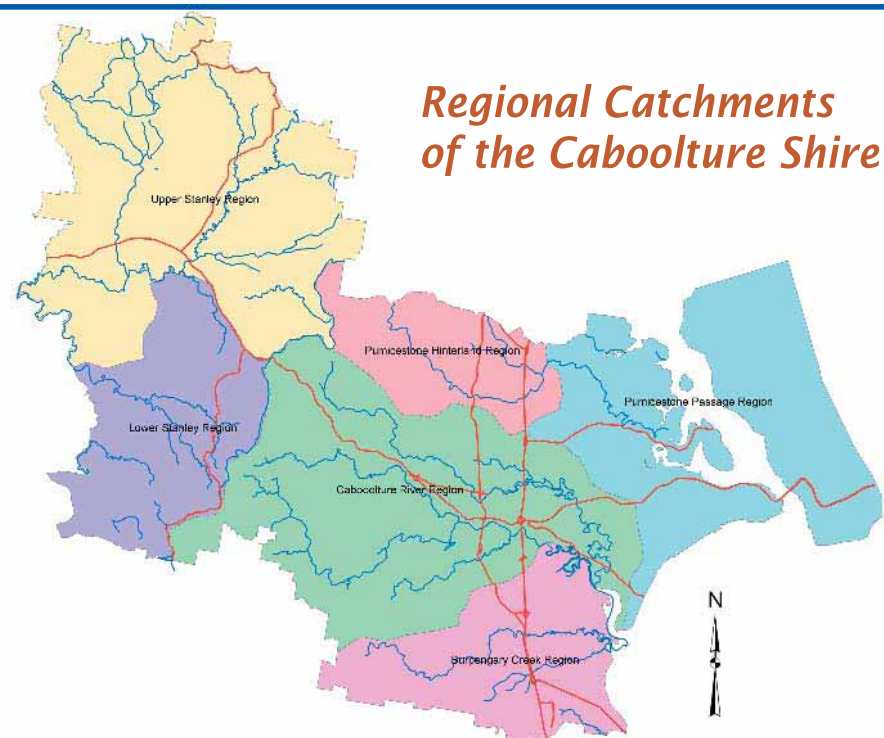
- Remove weeds with minimum soil disturbance.
- When controlling weeds on stream banks, it is particularly important that soil not be disturbed or exposed, as this will lead to stream bank erosion and silting of the stream. Best practice in such situations is:
  - use the "cut and paint" method of weed control, leaving the roots to hold the soil while the new plantings establish.
  - disturb the soil as little as possible when planting.
  - retain all leaf litter and other mulching material.
- Filter out nutrients, pollution and sediments with temporary filter structures and permanent filter plantings.
- Use only the "bioactive" form of glyphosate if absolutely necessary to spray herbicides near waterways.
- Maintain natural drainage lines.
- If replenishment planting is needed, use only species suitable to the wetland type from seed sourced from the local area.
- Marine Plants, including tidal plants are protected under the *Fisheries Act 1994*.

**Local Provenance** is very important when rehabilitating wetlands and riparian zones. This means that seed from other areas should not be used, but should be collected from, or as close as possible to, your site – or at least within the catchment. This maintains the local gene pool, and ensures that the plants used for the rehabilitation program are those that have adapted, over a considerable time, to the climate, soil, rainfall and other local influences.

Landholders who require advice or assistance with the propagation of plants for rehabilitation projects are welcome to consult their nearest Community Nursery:

- Bribie Island Community Nursery is between the Council Depot and the Indoor Bowls Club, on the service road off First Avenue.
- Caboolture Region Environmental Education Centre (CREEC) Community Nursery is at 150 Rowley Road, Burpengary.
- Land for Wildlife participants meet at the CREEC community Nursery to propagate plants from seed collected on their properties.

Contact Council's Call Centre for opening times of nurseries and for meeting times for the Land for Wildlife meetings.



## Further Information

If you would like further information on Vegetation Communities in the Caboolture Shire, please contact the Council Call Centre on:

**(07) 5420 0100**

For further information on the impact of fire on biodiversity please contact the Fire & Biodiversity Consortium at:

[www.fireandbiodiversity.org.au](http://www.fireandbiodiversity.org.au)



# Vegetation Communities in the Caboolture Shire

**WETLANDS** are areas that are permanently or seasonally covered with water – either static or flowing, salt or fresh – including the saltwater habitats of the coastal tidal zones to a maximum depth of 6 metres at low tide. Coastal and tidal wetlands are often distinctly zoned, from the seagrass beds of the shallow waters, to the mangroves, salt marshes, and She-Oak and Paperbark swamps, extending up the rivers, creeks and inlets to the limit of tidal influence. Freshwater wetlands include lakes, lagoons, dams, billabongs, swamps, rivers, streams and drainage channels.

**RIPARIAN ZONE** – refers specifically to the vegetation along rivers, creeks and other watercourses.



### TIDAL WETLANDS

May be inundated with each high tide (e.g. Mangroves), or only occasionally, by particularly high tides or storm surges (e.g. Salt Marshes, She-Oak and Paperbark swamps).

LOCATION IN SHIRE	SOIL TYPE
Coast of Bribie Island	<ul style="list-style-type: none"> <li>Anaerobic (waterlogged)</li> </ul>
From Deception Bay to Pumicestone Passage	<ul style="list-style-type: none"> <li>Salty</li> <li>Muds and sands, with high nutrient content.</li> </ul>

TIDAL WETLANDS



### FRESHWATER WETLANDS

Permanent, or seasonally inundated, but beyond the tidal influence. Usually still or slow flowing water, except in times of flood.

LOCATION IN SHIRE	SOIL TYPE
Throughout the Shire where conditions are suitable for the accumulation of water draining from the surrounding areas.	<ul style="list-style-type: none"> <li>A variety of soils and fine sediments.</li> <li>The water is retained due to an underlying impervious layer.</li> </ul>

FRESHWATER WETLANDS



### RIPARIAN ZONES

Fringing vegetation of creeks, rivers and drainage lines. There are three rivers and 32 sub-catchments in the Shire.

LOCATION IN SHIRE	SOIL TYPE
Caboolture River, Stanley River, and the streams and drainage lines throughout the Shire.	<ul style="list-style-type: none"> <li>Alluvials.</li> <li>Beds and banks are sometimes rocky.</li> </ul>

RIPARIAN ZONES

## VEGETATION COMMUNITY FACTSHEET

**TIDAL WETLANDS:** These are very productive habitats. Mangrove communities support fish, crabs, prawns and other marine life, and the seagrass beds are feeding grounds for fish and dugongs. They are feeding, resting and breeding sites for migratory and local water birds, with some areas protected by international agreements. They are important filters of sediments, nutrients and pollutants, and the coastal wetlands protect the land from stormy seas.

**Fires:** Fires in tidal wetlands are extremely rare, due to the wet soils and the moisture and/or salt content in the leaves. However for *Melaleuca quinquenervia* dominated communities fire intervals between 15 and 30 years are required for regeneration. Too frequent burning may prevent paperbark regeneration. Planned burns should be conducted when the substrate is wet to avoid the risk of peat fires.

**Wildlife:** Wildlife includes waders and many other species of water birds, raptors such as Ospreys, Sea Eagles and Brahminy Kites, and numerous other birds such as Mangrove Warblers, Mangrove Honeyeaters, and Kingfishers. Animals are few, and the False Water Rat (classified as vulnerable) and the Dugong are diminishing in numbers. Mangroves are important roosting sites for flying foxes and bats.

**FRESHWATER WETLANDS:** These act as filters for pollutants, sediments and nutrients. They are the major source of our water supplies, and the water storage from land runoff helps to recharge aquifers and maintain underground water supplies. Removal of vegetation from wetlands results in rising water tables and increased flooding.

**Wildlife:** These important wildlife habitats support land animals such as Swamp Wallabies, birds such as the Jabiru and Brolga, ducks, raptors, kingfishers, herons and many others, various reptiles, frogs, turtles, freshwater fish and crayfish, and insects such as dragonflies.

**Fires:** Fire is relatively rare, and wetlands provide wildlife refuges from fires in nearby forests. However in times of drought, wetlands are fire prone. The thick, multi-layered bark of the Paperbarks protects the trunks against moderate fires, and plants such as Bungwahl Fern, swamp grasses and sedges have underground stems which re-shoot after fire.

**RIPARIAN ZONES:** The riparian vegetation fringing the freshwater rivers and streams binds the banks against erosion and collapse, reduces the effects of flooding events, acts as a filter of sediments, nutrients and pollutants, provides shade to maintain cooler water temperatures and dim and patchy lighting where aquatic animals and fish can hide from predators. Remnant plant communities include Subtropical Rainforest (see Rainforest facts sheet), or Eucalypt communities (see Open Forests and Woodlands facts sheet).

**Wildlife:** Riparian vegetation provides habitats for both terrestrial and aquatic wildlife, and corridors for the movement of wildlife throughout the catchment. It supports a wide variety of birds, animals including platypus, amphibians, turtles, and reptiles, as well as flying foxes and bats, which are important seed dispersers and pollinators.

**Fires:** Fires are infrequent, depending on the vegetation nearby, but riparian vegetation and the waterway itself often act as firebreaks.

**Common Weeds:** Few weed species have adapted to the waterlogged, saline conditions of the Mangroves and other tidal wetlands. There are several aquatic weeds that have become invasive in static or slow-flowing fresh water, mainly as a result of the dumping of garden pond and fish tank plants. The other weeds listed in table 1 have also become major problems in wetland and riparian vegetation. (Note: When using any chemicals, read the label carefully and follow all directions. For further information on weeds and their control, contact Council or the Department of Natural Resources and Mines).

Table 1: Common weeds found in Wetland & Riparian Zones

BOTANICAL & COMMON NAME	WETLAND TYPE	CONTROL METHODS
<i>Cabomba caroliniana</i> Fanwort <i>Eichhornia crassipes</i> Water Hyacinth <i>Salvinia molesta</i> Salvinia	Fresh Water – static or slow-moving streams. Submerged or floating	Where possible, remove by scooping up and spread on groundsheets to dry out. Consult The Catchment Centre or D.N.R. for advice Note: all of these weeds are declared species under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> .
<i>Baccharis halimifolia</i> Groundsel Bush	All wetland areas and moist sites	Small plants: hand removal Larger plants: cut and paint with herbicide A declared species under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> .
<i>Schinus terebinthifolius</i> Broad-leaved Pepper Tree	Most wetland sites and disturbed land	Small plants: hand removal Larger plants: cut and paint with herbicide Large trees: stem injection with herbicide
<i>Celtis sinensis</i> Chinese Celtis/Chinese Elm	Along water courses	Small plants: hand removal Larger plants: cut and paint with herbicide Large trees: stem injection with herbicide
<i>Asparagus &amp; Protasparagus spp.</i> Asparagus Ferns	All wetlands	Use a strong, sharp knife to cut out the crown
<i>Ipomoea cairica</i> Mile-a-minute	Swamps & riparian zones	Small plants: hand removal Larger plants: cut and paint with herbicide

Table 2: Signature species for rehabilitating Wetlands & Riparian Zones

BOTANICAL NAME	COMMON NAME	VEG. TYPE	HABIT	FEATURES	SOILS TOLERATED	SPECIAL USES
<i>Azolla pinnata</i>	Azolla	Aquatic	AqF	Floats	N/A	Ponds & dams
<i>Bacopa monnieri</i>	Bacopa	WF WS	H		S Mud	GC EC
<i>Baeckea virgata (Syn. B. simile)</i>	Tall Baeckea	R	S	F	S	EC Screen
<i>Banksia robur</i>	Swamp Banksia	WF	S	F	S C	Bog areas
<i>Blechnum indicum</i>	Bungwahl Fern	WF	F		S	GC
<i>Callistemon pachyphyllus</i>	Wallum Bottlebrush	WF	S	F	S	Sh
<i>Callistemon salignus</i>	Willow Bottlebrush	WF R	T	D	S C	Sh
<i>Callistemon viminalis</i>	Weeping Bottlebrush	WF R	T		S C	Sh
<i>Carex appressa</i>	Tall Sedge	WF	Se		S	EC GC
<i>Casuarina cunninghamii</i>	River She-Oak	WF R	T	D F	S C	Sh EC
<i>Casuarina glauca</i>	Swamp She-Oak	WS R	T	D F Sa	S C	Sh EC
<i>Crinum pedunculatum</i>	Swamp Lily/River Lily	WF R	H	Sa	S C	EC
<i>Eucalyptus robusta</i>	Swamp Mahogany	WF	T	D	S C	Sh EC
<i>Glochidion sumatranum</i>	Umbrella Cheese Tree	WF	T	D	S C	Sh EC
<i>Hibiscus tiliaceus</i>	Cotton Tree	WS	T		S C	Sh EC
<i>Leptospermum brachyandrum</i>	Creek Tea-tree	WF R	S	D F Sa	S C	Sh
<i>Lomandra hystrix</i>	Mat Rush	WF R	H		S C	EC Shade
<i>Lophostemon suaveolens</i>	Swamp Box	WF R	T	D F	S C	Sh EC
<i>Ludwigia octovalvis</i>	Willow Primrose	WF	H		S C	EC
<i>Lythrum salicaria</i>	Purple Loosestrife	WF	H		S C	EC
<i>Melaleuca bracteata</i>	River Tea-tree	WF R	T	D F Sa	S C	Sh EC
<i>Melaleuca linariifolia</i>	Snow in Summer	WF R	T		S C Shale	Sh
<i>Melaleuca quinquenervia</i>	Broad-leaved Paperbark	WF WS	T	F Sa	S C	Sh EC
<i>Melastoma affine</i>	Blue Tongue	WF	S		S C	EC Boggy
<i>Nymphoides indica</i>	Water Snowflake	F	AqH			Frog ponds
<i>Philydrum lanuginosum</i>	Frogmouth	WF	H		S C	EC Ponds
<i>Phragmites australis</i>	Common Reed	WF WS	G	Sa	S C	EC
<i>Schoenoplectus mucronatus</i>	Club Rush	WF	Se		S C	EC
<i>Sesuvium portulacastrum</i>	Sea Purslane	WS	H	Sa	S C	EC
<i>Tristaniopsis laurina</i>	Water Gum	WF R	T		S C	Sh
<i>Waterhousia floribunda</i>	Weeping Myrtle	R	T		S	Sh EC Fruits

**Veg. Type:**

WF = freshwater wetlands  
WS = saltwater wetlands  
R = Riparian zones  
(freshwater streams)

**Habit:**

Se = Sedge  
T = Tree S = Shrub  
H = Herb F = Fern  
Aq = Aquatic

**Features:**

F = at least moderately frost tolerant  
Sa = tolerates salt winds  
D = somewhat drought tolerant

**Soils tolerated:**

S = Sandy  
C = Clay

**Special Uses:**

GC = Groundcover  
EC = Erosion control/  
soil binding  
Sh = Shade & Shelter

**NOTES:**

- All plants are used by wildlife - birds/animals/insects - for food, shelter and/or nesting and breeding sites.
- See also Closed Forest (Rainforest) Facts Sheet for species for Riparian Zone rainforests.
- Wetlands generally are not fire prone - however under prolonged drought conditions, the plants will burn.