

**Flora Assessment:  
Maroochy Bushland Botanic Gardens  
Palm Creek Road, Tanawha**

**March 2011**

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Palm Creek Road, Tanawha**

Prepared for  
**Sunshine Coast Council**  
March 2011



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**Project**

Flora Assessment: 'Maroochy Bushland Botanic Gardens', Palm Creek Road, Tanawha.

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## Executive Summary

ECO 9 was commissioned by the Sunshine Coast Council to conduct an assessment of the terrestrial flora situated within the Maroochy Bushland Botanic Gardens at Tanawha.

The scope of this assessment includes an appraisal of existing ecological and floristic information relating to the conservation area; and the presentation of additional field data in order to describe the flora found there. The survey specifically targeted, but was not limited to, areas identified as remnant bushland, significant vegetation types and known habitat for scheduled species.

The report includes, results from standard flora assessments; vegetation mapping; with additional surveys targeting specific flora groups and species.

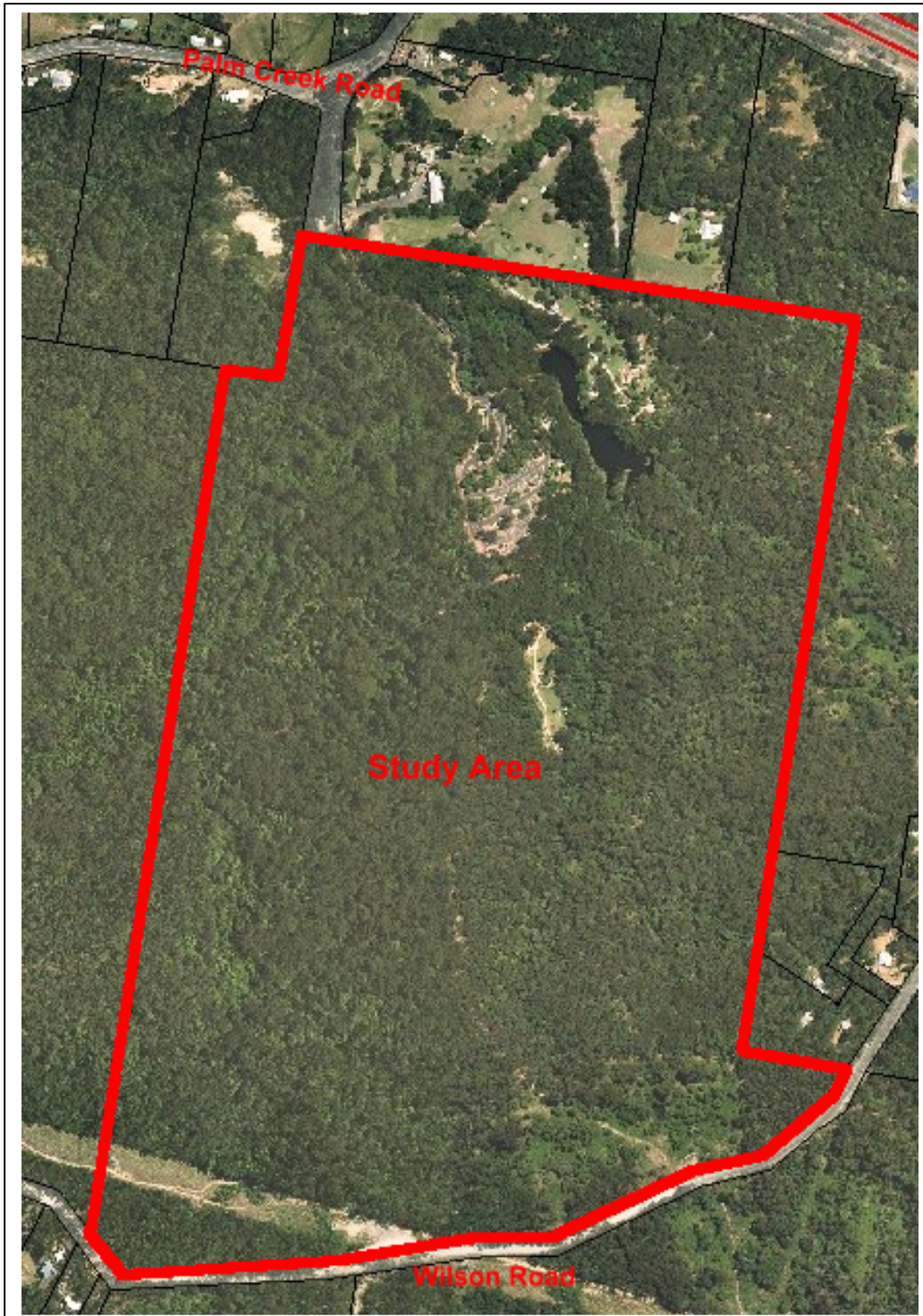
## Habitat Values Summary

- The study area supports two hundred and thirty eight (238) native flora species;
- Four Regional Ecosystems [RE12.3.1, RE12.3.2, RE12.9-10.14a and RE12.9-10.14] (Queensland Government, 2000) were recognised;
- One 'Endangered' Regional Ecosystem [RE12.3.1] (Queensland Government, 2000) was identified;
- One 'Of Concern' Regional Ecosystem [RE12.3.2] (Queensland Government, 2000) was identified;
- One area of 'High Value Regrowth Vegetation containing of concern regional ecosystems' (Queensland Government, 2000) was identified;
- No Threatened Ecological communities (Commonwealth Government of Australia, 1999) were observed;
- One scheduled flora species (Queensland Government, 1994) was observed [see section 4.2.2];
- No scheduled flora species (Commonwealth Government of Australia, 1999) were observed;
- Eight Significant Flora Species (Sunshine Coast Council 2010) were recorded;
- Fifty seven weed species were recorded; and
- The study area encompasses an example of coastal ranges remnant bushland that is located within a larger tract of vegetation that includes the adjoining ELCA Tanawha Tall Gums.

## 1.0 Introduction

The following report describes the flora within the Maroochy Bushland Botanic Gardens, located at Palm Creek Road, Tanawha on the Sunshine Coast (the 'study area', see Figure 1).

**Figure 1: Location of Study Area** [base image from SCC website 2011]



The study area has the following property description Lot 302 CG559; it is located in the coastal ranges between the following coordinates - Northings 501865 and 502749 and Eastings 7043740 and 7044935. Covering an area of approximately 76ha, the study area has an approximate centre point coordinate of Northing 502295 and Easting 7044340. The main access point for the study area is from Palm Creek Road on the northern boundary. As well, access is possible from Wilson Road; as well as the adjoining ELCA Tall Gums via a bush track on the eastern boundary.

The study area was inspected in March 2011. The report includes a description of the site, an overview of the flora and the vegetation communities, significant species, conservation values, weed species, listing of potentially occurring Queensland and Commonwealth threatened and listed species observed as well as detailed flora checklist for the site.

## **2.0 Methodology**

Boundaries of the study area were identified from surveyed maps, diagrams, flagged boundaries, aerial photographs and consultation with SCC officers. Specific locations in the study area were acquired with a Global Positioning System (GPS) set at the GDA 94 Zone 56J Map Datum.

Aerial photointerpretation (API) was used to determine sites that covered recognisable terrestrial vegetation communities, regrowth and disturbed areas. Ground truthing of API was conducted in March 2011.

### **2.1 Vegetation Mapping: Floristics and Structure**

A series of foot traverses of the area were carried out so that an adequate sample of each vegetation community was examined for its species composition to compile short structural and floristic descriptions and prepare a vegetation map. At specific sites, vegetation was assessed to record an appropriate level of data to determine whether vegetation at the site satisfied the criteria to qualify as remnant vegetation, and to which Regional Ecosystem it could be most accurately assigned.

### **2.2 Taxonomy and Nomenclature**

Generally the identification of flora species in the study area was conducted in-situ. However, several of the plants were identified in the office using a stereomicroscope, herbarium reference material and current botanical keys. Nomenclature follows publications including Bostock and Holland (2007) and Harden (1990-93).

A plant species check-list (see Appendix 1) was compiled to include the following data - scientific and common names, growth form, presence/absence per stratum, relative abundances (an estimation only of the numbers), conservation significance (see 2.3 below) and pest status (see 2.4 below).

### **2.3 Flora Significance and Conservation Status**

Vegetation significance at national, state, regional and local levels, based on plant distributions, noteworthiness, rarity and threats were also determined by an examination of current botanical literature. Publications referred to include, ANZECC (1999), Bostock and Holland (2007), Briggs and Leigh (1995), DERM (2011b), *Environment Protection and Biodiversity Conservation Act 1999* [*EPBC Act 1999*] (Commonwealth Government, 1999), Harden (1990-93), Logan River Branch SGAP (Qld Region) Inc (2008), *Nature Conservation Act 1992* [*NCA 1992*] (Queensland Government, 1992), Sattler and Williams (1999), Stanley and Ross (1983-89); Maher et al (1998); Sunshine Coast Council (2010) and Turnbull and Olsen (1992).

Field searches for 'Threatened' flora species i.e. Extinct, Extinct in the wild, Critically Endangered, Endangered or Vulnerable listed in the Federal Government's *EPBC Act 1999*; and also for species listed as 'Endangered, Vulnerable or Near Threatened' (EVNT) in the Queensland Government's *NCA 1992*, were conducted.

An additional evaluation for Significant Flora Species and other Noteworthy flora species as recognised by Forster et al (1991); Logan River Branch SGAP (Qld Region) Inc (2008); Maher et al (1998); Maroochy Shire (October 2006); Sunshine Coast Council (2010) and Turnbull and Olsen (1992) was also conducted.

Vegetation communities are referred to as Regional Ecosystems (RE) and their conservation status is listed as 'Endangered (ERE), Of Concern (OCRE) or Not of Concern (NOCRE)' under the *Vegetation Management Act 1999* and *Vegetation Management Regulation 2000* (Queensland Government, 2000). The Department of Environment and Resource Management (DERM 2011a) RE mapping for the study area was extracted and assessed.

The *EPBC Act 1999* refers to an ecological community that may be 'critically endangered', 'endangered' or 'vulnerable' as a 'Threatened Ecological Community'.

Vegetation communities recognised in the study area were evaluated against these State and Federal criteria.



A Wildlife Online search was also conducted on the 22<sup>nd</sup> February 2011 (DERM 2011b) from the following specific point, Latitude: 26.7843<sup>o</sup> and Longitude: 153.1103<sup>o</sup>. The search recorded those species in a 25km radius from the above central point. Wildlife Online is the Department of Environment and Natural Resource Management's (DERM) wildlife database which contains recorded wildlife sightings and listings of plants, fungi, protists, mammals, birds, reptiles, amphibians, freshwater fish, marine cartilaginous fish and butterflies in Queensland.

## **2.4 Weed Species and Vegetation Condition**

Non-native plant species that have become established within native bushland areas are known by a range of common names including weeds, naturalised plants, declared plants, pest plants, environmental weeds, introduced plants, exotic plants and undesirable plants. Even Australian native plants can become 'naturalised' by a change in their natural geographic distribution range or natural ecological niche. For example, *Acacia podalyriifolia* (Queensland Silver Wattle) a plant which is commonly used for revegetation purposes on the Sunshine Coast does not occur naturally in the Shire. Other native plants such as *Schefflera actinophylla* (Umbrella Tree) and *Nephrolepis cordifolia* (Fishbone Fern) are often used as garden plants but now have become problems in remnant bushland.

Until the declaration of the *Land Protection (Pest and Stock Route Management) Act 2002* (Queensland Government 2002), pest plant species in Queensland were managed under the *Rural Lands Protection Act 1985*. In this Act they were referred to as 'declared' plants.

Under the *Land Protection (Pest and Stock Route Management) Regulation 2003* (Queensland Government 2010) pest plants are still regarded as 'declared plants' and are listed in three different categories – Class 1; Class 2 and Class 3.

Species not declared under the *Land Protection (Pests and Stock Route Management) Act 2002* (Queensland Government 2002) may still be declared at a local government level under local laws. Species declared as Class 3 may be subject to local legal control outside environmentally significant areas.

Local governments are responsible for ensuring adequate control of declared weeds on all private and municipal land in their area. They are charged with developing local government area pest management plans which are to be updated every four years.

The study area is situated within the former Maroochy Shire Council's boundaries and as such was covered by the *Maroochy Pest Management Plan (MPMP 2006 – 2010)*. Since the amalgamation of the three Shires on the Sunshine Coast the MPMP 2006-2010 has been superseded by the Sunshine Coast

Local Government Area Pest Management Plan 2011-2015 (Sunshine Coast Council, 2011-2015). In the 2011-2015 plan the Council categorized pest plants into five (5) management categories -

- Under Surveillance;
- Broad Control;
- Strategic Management;
- Local Control; and
- General Environmental Pests.

In 2002 the Queensland Herbarium categorised two hundred species of naturalised plants in Southeastern Queensland in order of their 'invasiveness' (Queensland Herbarium, 2002).

Weed species observed in the study area were assessed against those listed in the *Land Protection (Pest and Stock Route Management) Act 2002*, the Queensland Herbarium's 2002 list and the Sunshine Coast Local Government Area Pest Management Plan 2011-2015.

Vegetation condition is largely based on those categories of Buchanan (1989) and used by The National Trust of Australia (NSW). Bushland condition has been assessed on plant condition, habitat diversity, interspersed habitat, spatial management, conditions of margins, the pattern and source of weed invasion, drainage patterns, foot tracks and adjoining land use (Buchanan, 1989) and is divided into four categories ranging from 'good', 'fair', 'poor' to 'very poor'.

## 2.5 Limitations

Time constraints have meant that the final enumeration of the vegetation should be seen as indicative only (see seasonality below).

Botanical names, distributions and rarity are constantly subject to revision, see Bostock and Holland (2007); Henderson (1997 and 2002); Queensland Herbarium (1993, 1994, 1995, 1996 and 1997). In a recent taxonomic amendment, Pink Tips formerly known as *Callistemon salignus* was revised to *Melaleuca saligna* (EPA 2006-2007).

This assessment does not account for plant species that may be evident during different seasons of the year. These could include species from the family Orchidaceae which are semi-deciduous, deciduous or not easily seen in the non-growing/flowering season; 'hidden' in the canopy as an epiphyte; and grasses from the family Poaceae which have an annual life cycle. Furthermore, other ephemeral species that tend to be short lived and only flower for a short time period may have also not been visible.

Regional ecosystems and their status also continue to be modified. For example, the Regional Ecosystem Description Database (REDD), used in the *VMA 1999*, has been produced in several editions - REDD Version 3.0 - October 2001; REDD Version 3.1- October 2002; REDD Version 3.2 - March 2003; REDD Version 4.0 - September 2003 and the Survey and Mapping of 2003 Remnant Vegetation Communities, Regional Ecosystems of Queensland resulting in Version 5.0 and Vegetation Management Act Regional Ecosystem and Remnant Map-Version 6 of Nov 2009.

Every attempt to present up-to-date authoritative text in this assessment was undertaken.

The survey and report were conducted and prepared between 28/2/2011 and 21/3/2011. Both are based on the conditions encountered and information reviewed at the time of preparation. The author disclaims responsibility for any changes that may have occurred after this time.

### **3.0 Description of the Site**

The study area consists of a range of landform patterns which includes areas of flat flood plain, moderate to steep slopes, a main creek line and several gully lines, a large lake/dam/lagoon, rises and ridges. Part of the creek line forms the main channel of Mountain Creek. Basically flowing in a south to north direction through the western sections of the study area, the upper reaches of the creek are generally rocky, with colluvium and sand lower down the contour. A number of larger gullies enter this main creek. Within the study area the land rises from approximately 30m Above Sea Level (ASL) near the northern boundary on the creek line; to a high point of around 110m ASL on the southern boundary near Wilson Road.

Geology in the study area is summarised in the RE mapping by DERM (2011a). This mapping (see Figure 2) delineates two land zones within the study area; land zone 9/10, which is mapped as the dominant land zone; and land zone 3 situated mainly on the creek line along the western boundary. In geological terms, land zone 9/10 is regarded as 'coastal remnant Tertiary surfaces ± Cainozoic and Mesozoic sediments;' while land zone 3 relates to 'Quaternary alluvial systems, including floodplains, alluvial plains, alluvial fans, terraces, levees, swamps, channels, closed depressions and fine textured palaeo-estuarine deposits'(Sattler and Williams 1999).

The study area has a conservation area (ELCA Tall Gums), a Golf Course and rural acreage type developments around its perimeter and generally the ecological condition of the remnant areas are good. However there are also five disturbed areas located across the study area. Three of the larger

areas are in the mid northern parts; with a lake/dam/lagoon; parking areas, walking and vehicular tracks, lawns and bush plantings/landscaping. The two other disturbed areas are in the south near Wilson Road and include a power line easement as well as an old house site; these two areas are in very poor condition.

Direct connections to other larger tracts of remnant bushland areas exist around most of the boundary.

Within the study area there is a gravel vehicular track that crosses from the old house site on Wilson Road to the centre of the study area. Another track diverts to the east into the ELCA Tall Gums. There are also a number of walking tracks throughout the remnant vegetation.

## 4.0 Vegetation: Results and Discussion

### 4.1 Vegetation Communities

#### 4.1.1 Regional Ecosystems

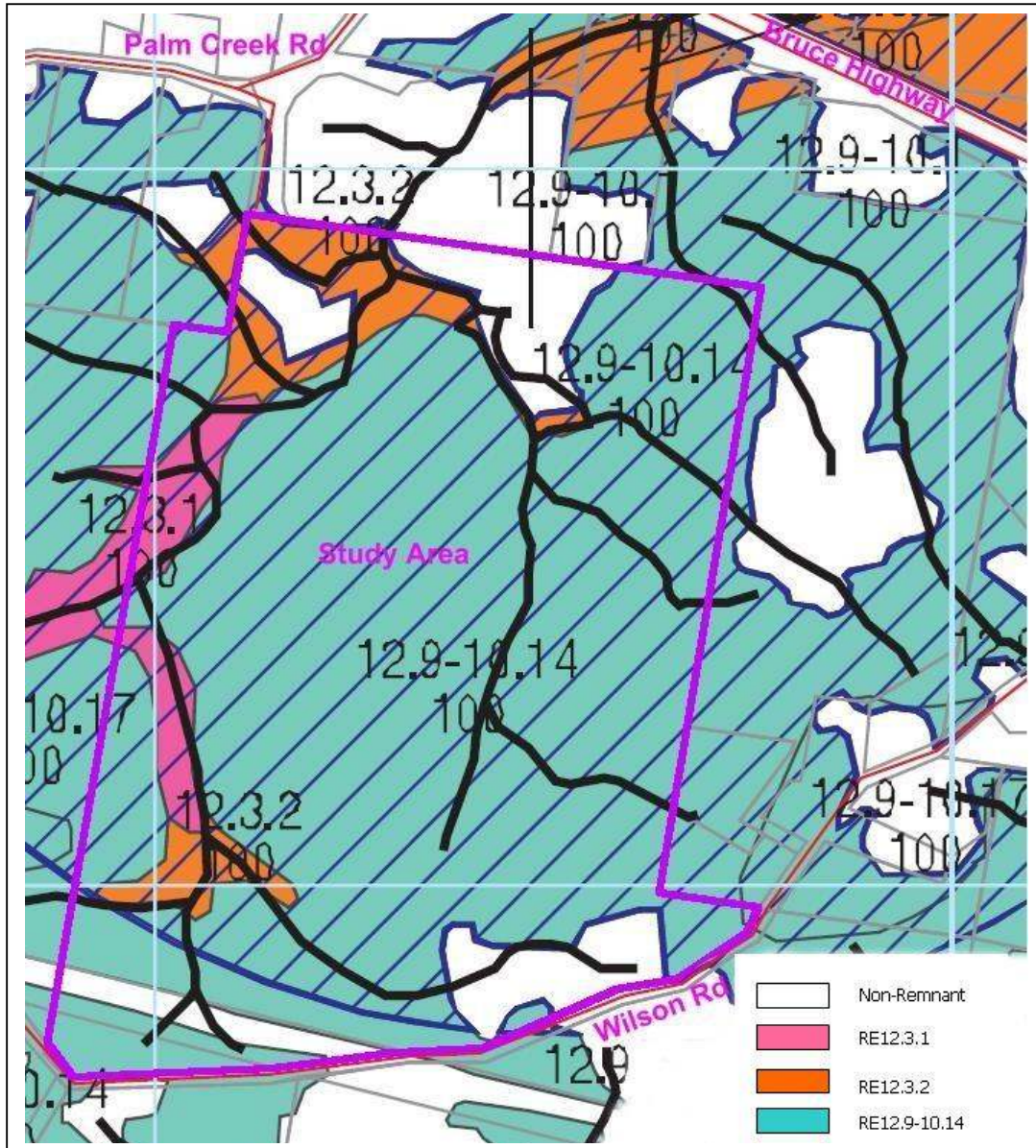
Current mapping by the Queensland Herbarium (DERM 2011a) delineates four (4) REs within the study area, i.e. RE12.3.1, RE12.3.2, RE12.9-10.14 and RE12.9-10.17. These ecosystems are described in Table 1 and Figure 2.

**Table 1: Regional Ecosystems**

Regional Ecosystem (DERM 2011a)	Short Description (Sattler and Williams 1999)
12.3.1	Gallery rainforest (notophyll vine forest) on alluvial plains
12.3.2	<i>Eucalyptus grandis</i> tall open forest on alluvial plains
12.9/10.14	<i>Eucalyptus pilularis</i> tall open forest on sedimentary rocks
12.9/10.17	Open forest complex often with <i>Eucalyptus acmenoides</i> , <i>E. major</i> , <i>E. siderophloia</i> ± <i>Corymbia citriodora</i> on sedimentary rocks

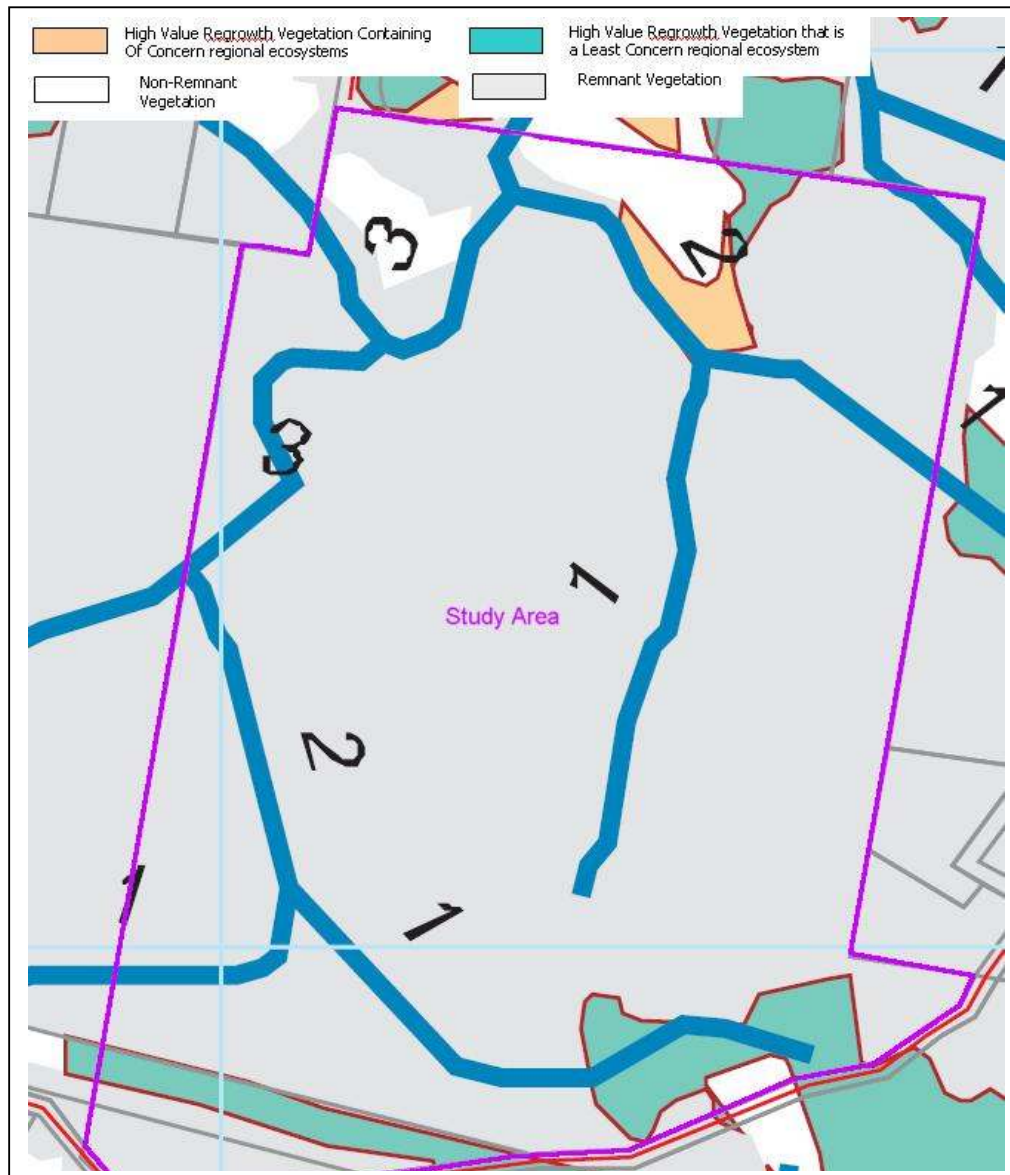
There are three smaller areas of RE12.3.2 which are situated along the main creek line on the western and northern boundaries; as are the two areas of RE12.3.1. A small area of RE12.9-10.17 is situated on the slopes along the western boundary. RE12.9/10.14 appears to dominate the study area and encompasses the lower slopes, gully lines as well as the ridges and rises.

**Figure 2: Regional Ecosystem Mapping for the Study Area (from DERM 2011a)**



Four areas are not mapped as remnant vegetation; two are near the northern entrance at Palm Creek Road and the other two in the south to south-eastern corner, near Wilson Road. However, within these non remnant areas regrowth vegetation has been mapped (see Figure 3).

**Figure 3: Regrowth Mapping for the Study Area (from DERM 2011c)**



#### **4.1.2 Vegetation Communities in the Study Area**

The vegetation observed in the study area differs slightly from the RE mapping as delineated by DERM (2011a). Four (4) vegetation communities were identified (see Figure 4), they are,

- (1) Tall notophyll vine forest with a mixed species canopy on alluvial plains;
- (2) Tall to very tall ecotone forest with *Eucalyptus grandis*, *E.microcorys*, *Corymbia intermedia*, *Syncarpia glomulifera*, *Lophostemon confertus* and notophyll forest species on alluvial plains;

- (3) Tall to very tall ecotone forest with *Eucalyptus grandis*, *E. microcorys*, *Syncarpia glomulifera*, *Lophostemon confertus*, *Eucalyptus pilularis* and notophyll forest species on sedimentary rocks; and
- (4) Tall to very tall *Eucalyptus pilularis*, *E. propinqua*, *E. siderophloia*, *Corymbia trachyphloia*, *Syncarpia glomulifera* and *Lophostemon confertus* open forest on sedimentary rocks.

**Figure 4: Vegetation Communities in the Study Area**

[base image from SCC 2011]

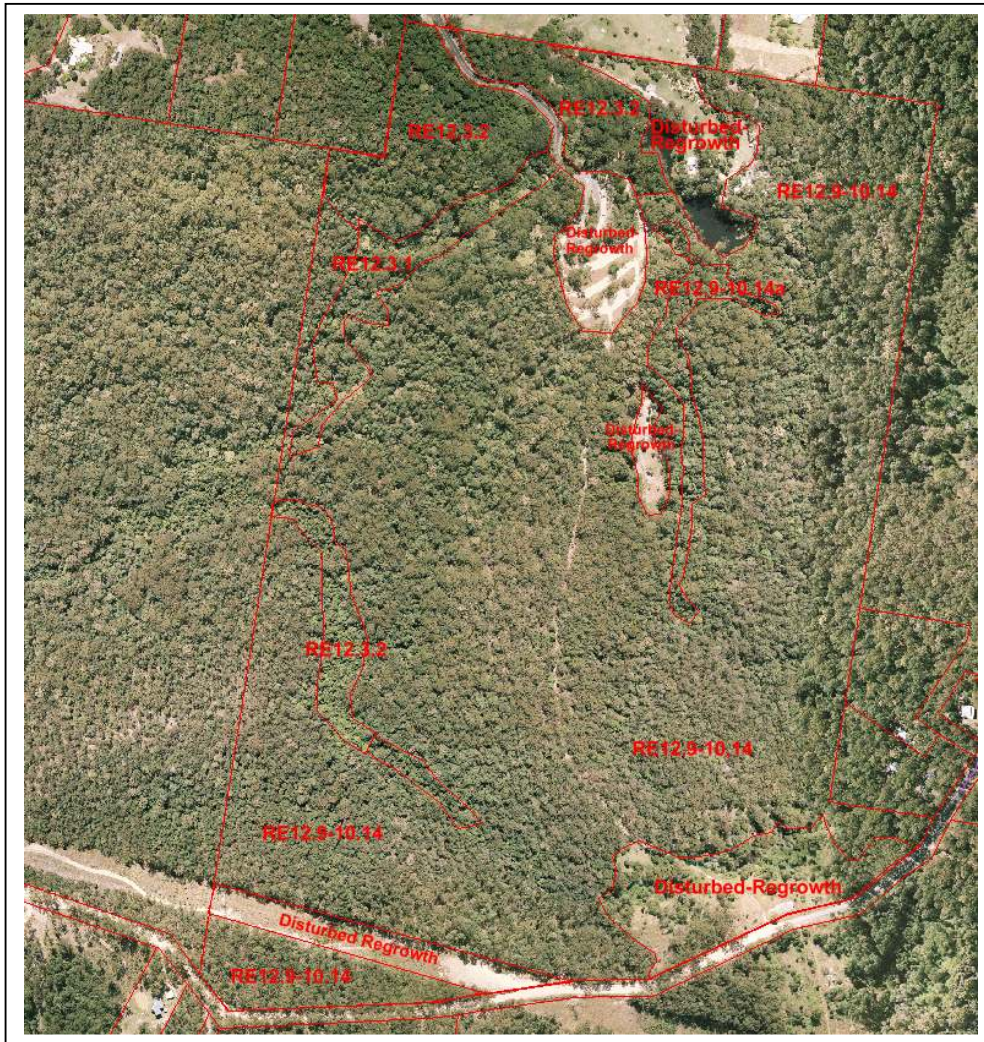


Table 2 below summarises the vegetation communities observed in the study area together with the corresponding RE as described by Sattler and Williams (1999). There are also five (5) areas mapped as disturbed-regrowth.

**Table 2: Vegetation Communities Observed and Regional Ecosystem Equivalents**

Vegetation Community	Description	Regional Ecosystem	Short Description (Sattler and Williams 1999)
1	Tall notophyll vine forest with a mixed species canopy	12.3.1	Gallery rainforest (notophyll vine forest) on alluvial plains
2	Tall to very tall ecotone forest with <i>Eucalyptus grandis</i> , <i>E. microcorys</i> , <i>Corymbia intermedia</i> , <i>Syncarpia glomulifera</i> , <i>Lophostemon confertus</i> and notophyll species	12.3.2	<i>Eucalyptus grandis</i> tall open forest on alluvial plains
3	Tall to very tall ecotone forest with <i>Eucalyptus grandis</i> , <i>E. microcorys</i> , <i>Syncarpia glomulifera</i> , <i>Lophostemon confertus</i> , <i>Eucalyptus pilularis</i> and notophyll species	12.9/10.14a	Open-forest of <i>Eucalyptus grandis</i> , <i>Lophostemon confertus</i> , <i>E. microcorys</i> , <i>Syncarpia glomulifera</i> ± <i>E. pilularis</i> on sedimentary rocks
4	Tall to very tall <i>Eucalyptus pilularis</i> , <i>E. propinqua</i> , <i>E. siderophloia</i> , <i>Corymbia trachyphloia</i> , <i>Syncarpia glomulifera</i> and <i>Lophostemon confertus</i> open forest	12.9/10.14	<i>Eucalyptus pilularis</i> tall open forest on sedimentary rocks

## 4.2 Significant Flora Species, Ecological Communities and Weed Species

### 4.2.1 Flora Species

Two hundred and thirty eight (238) native flora species in eighty eight (88) families are supported in the study area. All species, their position in the forest strata and relative abundances are listed in Appendix 1.

### 4.2.2 Threatened Flora Species

Sixty seven (67) EVNT listed species of flora have been recorded (DERM 2011b) from within a 25km radius of the study area (see Appendix 2). Most of these species are associated with ecosystems that are not represented in the study area and are thus unlikely to occur in the vegetation on site. Many of the rainforest species listed are found in ecosystems with higher nutrient volcanic soils. Five (5) species are supported in similar ecosystems found in the study area and it is possible for them to occur here; they are listed in Appendix 3.



One species *Pararistolochia praevenosa* (Richmond Birdwing Vine), which is listed in the Queensland Government's *NCA 1992* as a 'Near Threatened' species, was observed in the study area along the creek line (see Table 3). However, it appears that these specimens may have been planted as the plants are small (see plate 10).

**Table 3: *Pararistolochia praevenosa* location details**

(Note - GPS readings may vary due to interference by dense vine forest canopy cover)

Site No.	Species	Easting	Northing	Comments
1	<i>Pararistolochia praevenosa</i>	502472	7044458	About four small vines were observed along main creek line (probably planted).

No Threatened species listed by Commonwealth legislation (Commonwealth Government of Australia, 1999) or State legislation (Queensland Government, 1994) were observed in the study area.

#### 4.2.3 Significant Flora Species

An additional seven (7) noteworthy plant species were recorded (see Table 4); they are regarded as 'Significant Flora Species' (Sunshine Coast Council 2010). For all Significant Flora Species and relative abundances see plant species list (Appendix 1).

**Table 4: Significant Flora Species recorded within the Study Area**

Taxon	Family	G/F	Common Name
<i>Araucaria bidwillii</i>	ARAUCARIACEAE	Tree	Bunya Pine
<i>Dodonaea triquetra</i>	SAPINDACEAE	Shrub	Large-leaved hop bush
<i>Guioa acutifolia</i>	SAPINDACEAE	Tree	Northern Guioa
<i>Mischocarpus australis</i>	SAPINDACEAE	Tree	Red Pear Fruit
<i>Myrsine subsessilis</i> ssp. <i>subsessilis</i>	MYRSINACEAE	Shrub	Red Muttonwood
<i>Quintinia verdonii</i>	GROSSULARIACEAE	Tree	Grey Possumwood
<i>Sloanea australis</i>	ELAEOCARPACEAE	Tree	Maiden's Blush

#### 4.2.4 Significance of the Vegetation Communities

The remnant vegetation in the study area consists of four (4) vegetation communities, RE12.3.1, RE12.3.2, RE12.9/10.14a and RE12.9/10.14. The conservation status of RE12.3.1 is 'Endangered'; RE12.3.2 is 'Of Concern'; while RE12.9/10.14a and RE12.9/10.14 are 'Not of Concern' (Queensland Government 2000).

**Table 5: Regional Ecosystems**

Vegetation Community	Regional Ecosystem (DERM 2011a)	Short Description (Sattler and Williams 1999)	RE Conservation Status
1	12.3.1	Gallery rainforest (notophyll vine forest) on alluvial plains	Endangered
2	12.3.2	<i>Eucalyptus grandis</i> tall open forest on alluvial	Of concern

Vegetation Community	Regional Ecosystem (DERM 2011a)	Short Description (Sattler and Williams 1999)	RE Conservation Status
		plains	
3	12.9/10.14a	Open-forest of <i>Eucalyptus grandis</i> , <i>Lophostemon confertus</i> , <i>E. microcorys</i> , <i>Syncarpia glomulifera</i> ± <i>E. pilularis</i> on sedimentary rocks	Not of concern
4	12.9/10.14	<i>Eucalyptus pilularis</i> tall open forest on sedimentary rocks	Not of concern

No Threatened Ecological communities (Commonwealth Government of Australia, 1999) were observed in the study area.

The study area encompasses an example of coastal ranges remnant bushland that is located within a larger tract of vegetation that includes the adjoining ELCA Tall Gums in the east.

#### 4.2.5 Weed Species

In all, fifty seven (57) of the two hundred and ninety four (294) species recorded within the study area are regarded as weed species (see Appendix 4). The main impact from many of these species is found in the disturbed/regrowth sections, particularly on the southern boundary near Wilson Road. This area is located higher on the slopes, so there will be a tendency for the problematic species to spread 'downslope', into the park proper.

Four (4) Class 3 'declared' species were observed in the study area; they are listed in Appendix 4. *Lantana camara* was noted as common to abundant and scattered throughout. It is particularly common around the disturbed/regrowth area near the old house site in the south-eastern corner of the study area; it is also on the western side of the creek line, northwest of the main car park. Camphor Laurel (*Cinnamomum camphora*) another Class 3 pest and a 'Local Control' listed species (Sunshine Coast Council 2011-2015) was noted as occasional and scattered throughout; a number were noted on the western side of the creek line, northwest of the main car park. Broadleaf Paspalum (*Paspalum mandiocanum*) listed as 'Local Control' by the Sunshine Coast Council 2011-2015, was common to abundant in the small sliver of remnant between the power line easement and Wilson Road. Two 'Strategic Management' listed species (Sunshine Coast Council 2011-2015); Blue Morning Glory (*Ipomoea indica*) and Singapore Daisy (*Sphagneticola trilobata*) were also common in this area. Mickey Mouse Bush (*Ochna serrulata*), listed as 'Local Control' by the Sunshine Coast Council 2011-2015, was common in a gully around the following GPS coordinate Northing 502582 and Easting 7044250.

For all weed species, including relative abundances and status, see plant species list (Appendix 1).

## 5.0 Habitat Values Summary

- The study area supports two hundred and thirty eight (238) native flora species;
- Four Regional Ecosystems [RE12.3.1, RE12.3.2, RE12.9-10.14a and RE12.9-10.14] (Queensland Government, 2000) were recognised;
- One 'Endangered' Regional Ecosystem [RE12.3.1] (Queensland Government, 2000) was identified;
- One 'Of Concern' Regional Ecosystem [RE12.3.2] (Queensland Government, 2000) was identified;
- One area of 'High Value Regrowth Vegetation containing of concern regional ecosystems' (Queensland Government, 2000) was identified;
- No Threatened Ecological communities (Commonwealth Government of Australia, 1999) were observed;
- One scheduled flora species (Queensland Government, 1994) was observed [see section 4.2.2];
- No scheduled flora species (Commonwealth Government of Australia, 1999) were observed;
- Eight Significant Flora Species (Sunshine Coast Council 2010) were recorded;
- Fifty seven weed species were recorded; and
- The study area encompasses an example of coastal ranges remnant bushland that is located within a larger tract of vegetation that includes the adjoining ELCA Tanawha Tall Gums.

## 6.0 References

ANZECC (1999). *Threatened Australian Flora*. Australian and New Zealand Environment and Conservation Council (ANZECC), Australian Nature Conservation Agency Canberra.

Bostock, P.D. and Holland, A.E. (eds) (2007). *Census of the Queensland Flora 2007*. Queensland Herbarium Environmental Protection Agency, Brisbane.

Briggs, J.D. and Leigh, J.H. (1995). *Rare or Threatened Australian Plants*. CSIRO Publishing Victoria.

Buchanan, R.A. (1989). *Bushland Regeneration, recovering Australian landscapes*. TAFE Student Learning Publications, TAFE NSW, Sydney.

Commonwealth Government of Australia (1999). Environmental Protection Biodiversity Conservation Act 1999 (*EPBC Act 1999*). Federal Government Legislation, Canberra.

DERM (2011a). Vegetation Management Act Regional Ecosystem and Remnant Map, Version 6. Department of Environmental and Resource Management (DERM), Queensland Herbarium Survey and Mapping. Queensland Government Brisbane. [http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional\\_ecosystems/introduction\\_and\\_status/regional\\_ecosystem\\_maps/index.php](http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional_ecosystems/introduction_and_status/regional_ecosystem_maps/index.php)

DERM (2011b). Department of Environmental and Resource Management (DERM). Wildlife Database. Queensland Government Brisbane. [http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/wildlife\\_online/#selected\\_area](http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/wildlife_online/#selected_area)

DERM (2011c). Regrowth Vegetation Map, Version 2. Department of Environmental and Resource Management (DERM), Queensland Herbarium Survey and Mapping. Queensland Government Brisbane. [http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional\\_ecosystems/introduction\\_and\\_status/regional\\_ecosystem\\_maps/index.php](http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional_ecosystems/introduction_and_status/regional_ecosystem_maps/index.php)

Forster, P.I., Bostock, P.D., Bird, L.H. and Bean, A.R. (1991). *Vineforest Plant Atlas for South-East Queensland*. Queensland Herbarium Queensland Government, Brisbane.

Harden, G.J. (Editor, 1990-3). *Flora of New South Wales*. Vol.1 (1990); Vol.2 (1991) Vol.3 (1992) and Vol.4 (1993). New South Wales University Press, Kensington Sydney.

Logan River Branch SGAP (Qld Region) Inc (2008). *Mangroves to Mountains* Revised Edition. Logan River Branch SGAP (Qld Region) Inc. Brown's Plains, Queensland.

Maher, M. and Associates (1998). *Conservation Assessment and Management Plans for Remnant Vegetation in Maroochy Shire. Vol. 1 and 2*. Report to the Maroochy Shire Council.

Maroochy Shire (October 2006). *Maroochy Shire Biodiversity Strategy* MSBS. Maroochy Shire Council, Nambour.

Maroochy Shire (2006-2010). *Maroochy Pest Management Plan* MPMP, 2006-2010. Maroochy Shire Council, Nambour.

Queensland Government (1992). *Nature Conservation Act 1992*. Queensland Government Legislation, Brisbane.

Queensland Government (1994). *Nature Conservation (Wildlife) Regulation 1994*, Subordinate Legislation 1994 No. 474. *Nature Conservation Act 1992*. Queensland Government Legislation, Brisbane.

Queensland Government (1999). *Vegetation Management Act 1999*. Queensland Government Legislation, Brisbane.

Queensland Government (2000). *Vegetation Management Act 1999: Vegetation Management Regulation 2000*. Reprint No.5. Reprinted as in force on 1 August 2010. Queensland Government, Brisbane. Queensland Government Legislation, Brisbane.

Queensland Government (2002). *Land Protection (Pests and Stock Route Management) Act 2002*. Queensland Government legislation, Brisbane.

Queensland Government (2010). *Land Protection (Pest and Stock Route Management) Regulation 2003*. Reprint No. 4H. Reprinted as in force on 1 October 2010. Queensland Government legislation, Brisbane.

Queensland Herbarium (2002). Invasive Naturalised Plants in Southeast Queensland, ranked list. Queensland Environmental Protection Agency, Queensland Government, Brisbane.

SCC (2011). Aerial images from Sunshine Coast Regional Council's Maproom website (<http://maproom.caloundra.qld.gov.au/website/calmap/viewer.asp?w=calmap>).

Sattler, P.S. and Williams, R.D. (Eds) (1999). *The Conservation Status of Queensland Bioregional Ecosystems*. Environment Protection Agency, Brisbane.

Stanley, T.D. and Ross, E.M. *Flora of South-eastern Queensland*, Vol. 1(1983); Vol. 2(1986) and Vol. 3(1989). Queensland Department of Primary Industries, Brisbane.

Sunshine Coast Council (2010). Sunshine Coast Biodiversity Strategy 2010-2020. Sunshine Coast Council, Nambour. (<http://www.sunshinecoast.qld.gov.au/sitePage.cfm?code=biodiversity-strategy>).

Sunshine Coast Council (2011-2015). *Sunshine Coast Local Government Area Pest Management Plan 2011-2015*. Sunshine Coast Council Nambour Queensland.

Turnbull, M.H. and Olsen, M.F. (1992). *Vegetation Survey and Assessment of Landscapes within the boundaries of the Maroochy Shire*.

# APPENDICES

## Appendix 1: Plant Species Checklist

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	l	m	c	Abund.
<i>Abrophyllum ornans</i>	CARPODEACEAE				SH	Native Hydrangea	-	l	-	-	U
<i>Acacia falcata</i>	MIMOSACEAE				SH	Sickle Wattle	-	l	-	-	U
<i>Acacia leiocalyx ssp leiocalyx</i>	MIMOSACEAE				SH	Black Wattle	-	l	-	-	C
<i>Acacia longissima</i>	MIMOSACEAE				T	Narrow-leaf Wattle	-	l	-	-	O
<i>Acacia melanoxylon</i>	MIMOSACEAE				T	Blackwood	-	l	-	-	C
<i>Acacia oshanesii</i>	MIMOSACEAE				ST		-	l	-	-	O
<i>Acronychia pauciflora</i>	RUTACEAE				T	Soft Acronychia	-	l	-	-	U
<i>Acronychia wilcoxiana</i>	RUTACEAE				T	Silver Aspen	-	l	-	-	U
<i>Acrotriche aggregata</i>	ERICACEAE				SH	Red Cluster Heath	-	l	-	-	C
<i>Adiantum diaphanum</i>	ADIANTACEAE				F	Filmy Maidenhair	g	-	-	-	O
<i>Adiantum formosum</i>	ADIANTACEAE				F	Black Stem	g	-	-	-	O
<i>Adiantum hispidulum</i>	ADIANTACEAE				F	Rough Maidenhair	g	-	-	-	O
<i>Ageratina riparia *</i>	ASTERACEAE	25	LC		H	Mist Flower	g	-	-	-	O
<i>Ageratum houstonianum *</i>	ASTERACEAE	115	GEP		H	Blue Top	g	-	-	-	O/C
<i>Allocastraria littoralis</i>	CASUARINACEAE				T	Coastal She Oak	-	l	m	-	C
<i>Allocastraria torulosa</i>	CASUARINACEAE				T	Forest She Oak	-	-	m	-	O
<i>Alphitonia excelsa</i>	RHAMNACEAE				T	Red Ash	g	l	m	-	C/A
<i>Alphitonia petriei</i>	RHAMNACEAE				T	Pink Ash	g	-	-	-	R
<i>Alpinia arundelliana</i>	ZINGIBERACEAE				H	Small Native Ginger	g	-	-	-	R
<i>Alpinia caerulea</i>	ZINGIBERACEAE				H	Native Ginger	g	-	-	-	U
<i>Alyxia magnifolia</i>	APOCYNACEAE				SH	Broad Leaved Chain Fruit	g	l	-	-	O
<i>Anellema acuminata</i>	COMMELINACEAE				H	Slug Herb	g	-	-	-	U
<i>Aphananthe philippinensis</i>	ULMACEAE				T	Rough leaved Elm	-	l	-	-	R
<i>Araucaria bidwillii</i>	ARAUCARIACEAE		SFS		T	Bunya Pine	g	-	-	-	R
<i>Araucaria cunninghamii</i>	ARAUCARIACEAE				T	Hoop Pine	-	-	m	c	R
<i>Archidendron grandiflorum</i>	MIMOSACEAE				ST	Lace Flower Tree	-	l	-	-	R

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Archirhodomyrtus beckeri</i>	MYRTACEAE				T	Rose Myrtle	-	I	m	-	O
<i>Archontophoenix alexandrae</i> #	ARECACEAE		GEP		T		-	I	-	-	R
<i>Archontophoenix cunninghamiana</i>	ARECACEAE				T	Picabeen Palm	g	I	m	c	C
<i>Ardisia crenata</i> *	MYRSINACEAE		LC		SH	Coral Berry	-	I	-	-	R
<i>Aristida acuta</i>	POACEAE				H		g	-	-	-	U
<i>Asplenium australasicum</i>	ASPLENIACEAE				F	Bird's Nest Fern	-	I	m	-	U
<i>Astrotricha latifolia</i>	ARALIACEAE				SH	Broad Leaf Star Hair	-	I	-	-	U
<i>Babingtonia bidwillii</i>	MYRTACEAE				SH	Twiggy Myrtle	g	I	-	-	U
<i>Backhousia myrtifolia</i>	MYRTACEAE				T	Grey Myrtle	-	I	m	-	C
<i>Banksia integrifolia</i> v <i>integrifolia</i>	PROTEACEAE				T	Coast Banksia	-	I	-	-	R - planted
<i>Banksia oblongifolia</i>	PROTEACEAE				SH	Dwarf Banksia	-	I	-	-	R - planted
<i>Beilschmiedia elliptica</i>	Lauraceae				T	Grey Walnut	-	I	m	-	U
<i>Bidens pilosa</i> *	ASTERACEAE	110	LC		H	Pitchforks	g	-	-	-	O/C
<i>Billardiera scandens</i>	PITTOSPORACEAE				V	Climbing Apple-berry	g	I	-	-	O
<i>Blechnum cartilagineum</i>	BLECHNACEAE				F	Gristle Fern	g	-	-	-	C
<i>Bracharia decumbens</i> *	POACEAE		GEP		H	Signalgrass	g	-	-	-	U
<i>Brachychiton bidwillii</i>	STERCULIACEAE				SH	Rusty Kurrajong	-	I	-	-	O
<i>Brunoniella spiciflora</i>	GOODENIACEAE				H	White Brunoniella	g	-	-	-	C
<i>Caesalpinia scortechinii</i>	CAESALPINIACEAE				V	Wait-A-While	g	I	-	-	U
<i>Calamus muelleri</i>	ARECACEAE				V	Lawyer Vine	g	I	m	-	O
<i>Callerya megasperma</i>	FABACEAE				V	Native Wisteria	g	-	-	-	U
<i>Calochlaena dubia</i>	DICKSONIACEAE				F	False Bracken	g	-	-	-	C
<i>Canarium australasicum</i>	BURSERACEAE				T	Mango Bark	g	I	m	c	O
<i>Carex brunnea</i>	CYPERACEAE				H	Greater brown sedge	g	-	-	-	O
<i>Carex maculata</i>	CYPERACEAE				H		g	-	-	-	C
<i>Carissa ovata</i>	APOCYNACEAE				SH	Carissa	g	I	-	-	U/O
<i>Cassinia subtropica</i>	ASTERACEAE				SH	Subtropic Cassinia	-	I	-	-	U
<i>Cassytha filiformis</i>	Lauraceae				V	Love vine	-	I	-	-	U
<i>Cassytha pubescens</i>	Lauraceae				V	Dodder Vine	-	I	-	-	O
<i>Caustis blakei</i>	CYPERACEAE				H	Foxtail	g	-	-	-	U
<i>Cephalalaria cephalobotrys</i>	ARALIACEAE				V	Climbing Panax	g	-	-	-	O/C
<i>Cheilanthes sieberi</i>	ADIANTACEAE				F	Mulga Fern	g	-	-	-	U
<i>Chloris virgata</i> *	POACEAE				H	Feathertop rhodes grass	g	-	-	-	O



Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	l	m	c	Abund.
<i>Christella dentata</i>	THELYPTERIDACEAE				F	Dining	g	-	-	-	O
<i>Cinnamomum camphora</i> *	Lauraceae	8	LC	C3	T	Camphor Laurel	g	l	m	-	O
<i>Cinnamomum oliveri</i>	Lauraceae				T	Oliver's Sassafras	-	l	-	-	R
<i>Cissus antarctica</i>	Vitaceae				V	Water Vine	g	-	-	-	U
<i>Cissus hypoglauca</i>	Vitaceae				V	Five leaf water vine	g	l	m	-	C
<i>Cissus opaca</i>	Vitaceae				V	Small-leaf grape	g	-	-	-	U
<i>Claoxylon australe</i>	EUPHORBIACEAE				T	Brittle Wood	-	l	-	-	R
<i>Clerodendron floribundum</i>	VERBENACEAE				ST	Smooth Clerodendron	g	l	-	-	O
<i>Coelospermum paniculatum</i>	Rubiaceae				V	Coelospermum	g	-	-	-	U
<i>Commelina diffusa</i>	COMMELINACEAE				H	Native Wandering Jew	g	-	-	-	C
<i>Commersonia bartramia</i>	BYTTNERIACEAE				T	Brown Kurrajong	-	l	-	-	R
<i>Conyza canadensis</i> *	ASTERACEAE	179			H	Canadian Fleabane	g	-	-	-	O/C
<i>Cordylone rubra</i>	LAXMANNIACEAE				SH	Red Fruit Palm Lilly	g	l	-	-	O/C
<i>Corymbia intermedia</i>	MYRTACEAE				T	Pink Bloodwood	-	-	m	c	O/C
<i>Corymbia trachyphloia</i>	MYRTACEAE				T	Brown Bloodwood	-	l	m	c	C
<i>Crassocephalum crepidioides</i> *	ASTERACEAE				H	Thickhead	g	-	-	-	C
<i>Crotalaria brevis</i>	FABACEAE				H		g	-	-	-	U/O
<i>Crotalaria incana</i> *	FABACEAE				H	Shack shack	g	-	-	-	U
<i>Crotalaria lanceolata</i> *	FABACEAE				H	lance leaf rattlebox	g	-	-	-	U
<i>Cryptocarya glaucescens</i>	Lauraceae				T	Jack wood	-	l	m	c	C
<i>Cryptocarya macdonaldii</i>	Lauraceae				T	Cryptocarya	g	l	m	-	C
<i>Cryptocarya microneura</i>	Lauraceae				T	Murrogun	g	l	m	-	O
<i>Cryptocarya sclerophylla</i>	Lauraceae				T	Cryptocarya	g	l	-	-	O
<i>Cupaniopsis serrata</i>	SAPINDACEAE				ST	Smooth Tuckeroo	-	l	-	-	U
<i>Cyathea leichhardtiana</i>	CYATHEACEAE				F	Prickly Tree Fern	-	l	-	-	R
<i>Cyclophyllum coprosmoides</i>	Rubiaceae				ST	Coast Canthium	g	l	-	-	O
<i>Cymbopogon refractus</i>	POACEAE				H	Barbed Wire Grass	g	-	-	-	O
<i>Cyperus eragrostis</i> *	CYPERACEAE				H	Umbrella Sedge	g	-	-	-	U
<i>Cyperus pilosus</i>	CYPERACEAE				H		g	-	-	-	U
<i>Cyperus polystachyos</i>	CYPERACEAE				H	Bunchy sedge	g	-	-	-	O
<i>Dactyloctenium aegyptium</i> *	POACEAE				H	Egyptian crowfoot grass	g	-	-	-	U/O
<i>Daviesia umbellulata</i>	FABACEAE				SH	Bitter Pea	-	l	-	-	R
<i>Denhamia celastroides</i>	CELASTRACEAE				T	Denhamia	-	-	m	-	O/C

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Desmodium uncinatum</i> *	FABACEAE	64	LC		V	Silver leaf Desmodium	g	-	-	-	U
<i>Digitaria parviflora</i>	POACEAE				H	Small flower finger grass	g	-	-	-	O
<i>Dioscorea transversa</i>	DIOSCOREACEAE				V	Native Yam	g	-	-	-	O
<i>Diospyros kaki</i> *	EBENACEAE				ST	Wild Persimmon	-	I	-	-	R
<i>Diospyros pentamera</i>	EBENACEAE				T	Myrtle Ebony	g	I	-	-	U
<i>Dodonaea triquetra</i>	SAPINDACEAE		SFS		SH	Large-leaved hop bush	-	I	-	-	C
<i>Doodia aspera</i>	BLECHNACEAE				F	Prickly Rasp Fern	g	-	-	-	O
<i>Doodia heterophylla</i>	BLECHNACEAE				F	Rasp Fern	g	-	-	-	O
<i>Drymaria cordata</i>	CARYOPHYLLACEAE				H	Tropical Chickweed	g	-	-	-	U
<i>Drypetes deplanchei</i>	PUTRANJIVACEAE				T	Yellow Tulip	-	I	m	-	R/U
<i>Echinochloa colona</i> *	POACEAE				H	Awnless barnyard grass	g	-	-	-	U
<i>Echinochloa crus-galli</i> *	POACEAE		GEP		H	Barn yard grass	g	-	-	-	U
<i>Elaeocarpus eumundi</i>	ELAEOCARPACEAE				T	Eumundi Quondang	-	I	-	-	U/O
<i>Elaeocarpus grandis</i>	ELAEOCARPACEAE				T	Blue Quondong	g	I	-	-	U
<i>Elaeocarpus reticulatus</i>	ELAEOCARPACEAE				ST	Blueberry Ash	g	I	-	-	O
<i>Eleusine indica</i> *	POACEAE		GEP		H	Crow's foot Grass	g	-	-	-	U
<i>Embellia australiana</i>	MYRSINACEAE				V	Embellia	g	I	-	-	C
<i>Emilia sonchifolia</i>	ASTERACEAE				H	Emilia	g	-	-	-	C
<i>Endiandra discolor</i>	LAURACEAE				T	Rose Walnut	g	I	m	c	C'
<i>Entolasia stricta</i>	POACEAE				H	Wiry Panic	g	-	-	-	C/A
<i>Eucalyptus microcorys</i>	MYRTACEAE				T	Tallowwood	-	I	m	c	C
<i>Eucalyptus pilularis</i>	MYRTACEAE				T	Black Butt	-	-	m	c	C
<i>Eucalyptus propinqua</i>	MYRTACEAE				T	Grey Gum	-	-	m	c	C
<i>Eucalyptus siderophloia</i>	MYRTACEAE				T	Grey Ironbark	-	-	m	c	O
<i>Euchiton involucreatum</i>	ASTERACEAE				H	Star Cudweed	g	-	-	-	U
<i>Eupomatia bennettii</i>	EUPOMATIACEAE				H	Small Bolwarra	g	-	-	-	U/O
<i>Eupomatia laurina</i>	EUPOMATIACEAE				SH	Bolwarra	g	I	-	-	C
<i>Euroschinus falcata</i>	ANACARDIACEAE				T	Ribbonwood	-	I	-	-	U
<i>Ficus coronata</i>	MORACEAE				T	Creek Sandpaper Fig	g	I	m	-	C/A
<i>Ficus fraseri</i>	MORACEAE				T	Sandpaper Fig	-	I	-	-	R
<i>Fimbristylis dichotoma</i>	CYPERACEAE				H	Common Finger Rush	g	-	-	-	O
<i>Flagellaria indica</i>	FLAGELLARIACEAE				V	Flagellaria	g	-	-	-	O
<i>Flindersia bennettiana</i>	RUTACEAE				T	Bennett's Ash	g	I	m	c	C

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Flindersia schottiana</i>	RUTACEAE				T	Bumpy Ash	g	-	-	-	R
<i>Freycineta scandens</i>	PANDANACEAE				V	Broad-leaved Climbing Pandanus	g	I	m	-	C/A
<i>Geitonoplesium cymosum</i>	HEMEROCALLIDACEAE				V	Scrambling Lilly	g	I	-	-	C
<i>Glochidion ferdinandi v. ferdinandi</i>	PHYLLANTHACEAE				T	Cheese Tree	-	I	m	-	U
<i>Glochidion sumatranum</i>	PHYLLANTHACEAE				T	Umbrella Cheese Tree	-	I	-	c	O
<i>Glycine tabacina</i>	FABACEAE				V		g	-	-	-	C
<i>Glycine tomentella</i>	FABACEAE				V		g	-	-	-	O/C
<i>Gmelina leichhardtii</i>	VERBENACEAE				T	White Beech	g	-	-	-	R
<i>Gomphrena celosioides *</i>	AMARANTHACEAE				H	Gomphrena weed	g	-	-	-	U
<i>Gonocarpus chinensis v. verrucosus</i>	HALORAGACEAE				H	Chinese raspwort	g	-	-	-	C
<i>Gonocarpus micranthus</i>	HALORAGACEAE				H	Creeping raspwort	g	-	-	-	U
<i>Goodenia rotundifolia</i>	GOODENIACEAE				H	Star Goodenia	g	-	-	-	O/C
<i>Guioa acutifolia</i>	SAPINDACEAE		SFS		T	Northern Guioa	-	I	-	-	R
<i>Guioa serriglauca</i>	SAPINDACEAE				T	Guioa	-	I	-	-	U
<i>Gymnostachys anceps</i>	ARACEAE				H	Settler's Flax	g	-	-	-	U
<i>Halfordia kendack</i>	RUTACEAE				T	Saffron Heart, Kerosine Wood	-	I	-	-	U
<i>Hibbertia aspera</i>	DILLENIACEAE				SSH	Rough Guinea Flower	g	I	-	-	O
<i>Hibbertia scandens</i>	DILLENIACEAE				V	Twining Guinea Flower	g	I	-	-	O
<i>Hibbertia vestita</i>	DILLENIACEAE				SSH	Hairy Guinea Flower	-	I	-	-	O
<i>Hibiscus heterophyllus</i>	MALVACEAE				ST	Native Rosella	-	I	-	-	O
<i>Hodgkinsonia ovatiflora</i>	RUBIACEAE				T	Hodgkinsonia	-	I	-	-	U
<i>Homalanthus nutans</i>	EUPHORBIACEAE				ST	Bleeding Heart	g	I	-	-	O
<i>Hybanthus stellaroides</i>	VIOLACEAE				H	Spade Flower	g	-	-	-	U
<i>Hymenoporum flavum</i>	PITTIOSPORACEAE				T	Native Frangipani	-	I	-	-	R
<i>Hypericum gramineum</i>	CLUSIACEAE				H	Small St. John's Wort	g	-	-	-	U
<i>Hypochoeris radicata *</i>	ASTERACEAE				H	Cat's Ears	g	-	-	-	U
<i>Hypserpa decumbens</i>	MENISPERMACEAE				V	Hypserpa	g	-	-	-	C
<i>Imperata cylindrica</i>	POACEAE				H	Blady Grass	g	-	-	-	A
<i>Indigofera suffruticosa *</i>	FABACEAE				SH	Small-leaved indigo	-	I	-	-	U
<i>Ipomoea indica *</i>	CONVOLVULACEAE		SM		V	Blue Morning Glory	-	I	-	-	C
<i>Jagera pseudorhus</i>	SAPINDACEAE				T	Foam Bark	g	I	m	-	O
<i>Juncus prismatocarpus</i>	JUNCACEAE				H	Branching Rush	g	-	-	-	U

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Kummerowia striata</i> *	FABACEAE				H	Japanese clover	g	-	-	-	U
<i>Lagerstroemia indica</i> *	LYTHRACEAE				T	Crepe Myrtle	-	I	-	-	R
<i>Lantana camara</i> *	VERBENACEAE	1	LC	C3	SH	Lantana	g	I	-	-	C/A
<i>Lepidosperma laterale</i>	CYPERACEAE				H	Variable sawsedge	g	-	-	-	O
<i>Lepironia articulata</i>	CYPERACEAE				H	Tube Sedge	g	-	-	-	U
<i>Leucopogon juniperinus</i>	ERICACEAE				SH	Prickly Beard-heath	-	I	-	-	O
<i>Lindsaea microphylla</i>	LINDSAEACEAE				F	Lacy Wedge Fern	g	-	-	-	O
<i>Litsea australis</i>	LAURACEAE				T	Southern Bolly Gum	-	I	-	-	O
<i>Livistona australis</i>	ARECACEAE				T	Cabbage Palm	-	I	m	-	C
<i>Lobelia alata</i>	CAMPANULACEAE				H	Angled Lobelia	g	-	-	-	U
<i>Lobelia purpurascens</i>	CAMPANULACEAE				H	White Root	g	-	-	-	C
<i>Lomandra longifolia</i>	LAXMANNIACEAE				H	Spinyhead Matt Rush	g	-	-	-	C
<i>Lomandra multiflora</i>	LAXMANNIACEAE				H	Many Flowered Matt Rush	g	-	-	-	O
<i>Lomatia silaifolia</i>	PROTEACEAE				SH	Crinkle Bush	-	I	-	-	U
<i>Lophostemon confertus</i>	MYRTACEAE				T	Brush Box	g	I	m	-	C
<i>Lophostemon suaveolens</i>	MYRTACEAE				T	Swamp Box	g	I	m	-	U/O
<i>Ludwigia octovalvis</i>	ONAGRACEAE				SH	Willow Primrose	-	I	-	-	R/U
<i>Macaranga tanarius</i>	EUPHORBIACEAE				T	Macaranga	-	I	-	-	U
<i>Macroptilium atropurpureum</i> *	FABACEAE	51	LC		V	Siratro	g	-	-	-	U
<i>Macrotyloma axillaris</i> *	FABACEAE		LC		V	A Cow Pea	g	I	-	-	O
<i>Macrozamia lucida</i>	ZAMIACEAE				H	Pineapple Zamia	g	I	-	-	O
<i>Mangifera indica</i> *	ANACARDIACEAE				T	Mango	-	-	-	c	R
<i>Megathyrsus maximus</i> *	POACEAE	20	SM/LC		H	Guinea Grass	g	-	-	-	O/C
<i>Melaleuca saligna</i>	MYRTACEAE				T	Pink Tips	-	I	m	-	U/O
<i>Melicope eileryana</i>	RUTACEAE				T	Pink Euodia, Pink Princess	-	I	m	-	U
<i>Melinis minutiflora</i> *	POACEAE		LC		H	Molasses Grass	g	-	-	-	O
<i>Melinis repens</i> *	POACEAE		GEP		H	Red Natal Grass	g	-	-	-	U
<i>Melodinus australis</i>	APOCYNACEAE				V	Melodinus	g	-	-	-	U
<i>Mischocytera lautereriana</i>	SAPINDACEAE				T	Corduroy Tamarind	-	I	-	-	U
<i>Mischocarpus australis</i>	SAPINDACEAE		SFS		T	Red Pear Fruit	-	I	-	-	U
<i>Mischocarpus pyriformis</i>	SAPINDACEAE				T	Yellow Pear Fruit	-	-	m	-	U
<i>Monotoca scoparia</i>	EPACRIDACEAE				SH	Prickly Broom Heath	-	I	-	-	O
<i>Morinda jasminoides</i>	RUBIACEAE				V	Jasmine morinda, Sweet	g	I	-	-	O

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Myrsine subsessilis</i> ssp. <i>subsessilis</i>	MYRSINACEAE		SFS		SH	Red Muttonwood	g	I	-	-	O
<i>Myrsine variabilis</i>	MYRSINACEAE				T	Muttonwood	-	I	-	-	O
<i>Neolitsea dealbata</i>	LAURACEAE				T	Grey Bollywood	g	I	m	-	O
<i>Notelaea longifolia</i>	OLEACEAE				ST	Large Mock Olive	-	I	-	-	O
<i>Ochna serrulata</i> *	OCHNACEAE	22	LC		SH	Mickey Mouse Bush	g	I	-	-	C
<i>Opismenus hirtellus</i> ssp. <i>imbecillus</i>	POACEAE				H	Slender panic grass	g	-	-	-	O
<i>Ottochloa nodosa</i>	POACEAE				H	Short glumed panic	g	-	-	-	A
<i>Oxalis corniculata</i> *	OXALIDACEAE				H	Oxalis	g	-	-	-	O
<i>Oxylobium robustum</i>	FABACEAE				SH	Golden Shaggy Pea	-	I	-	-	R - planted
<i>Palmeria scandens</i>	MONIMIACEAE				SH	Arch Vine	g	-	-	-	O
<i>Panicum effusum</i> v <i>simile</i>	POACEAE				H	Hairy panic	g	-	-	-	C
<i>Pararistolochia praevenosa</i>	ARISTOLOCHIACEAE		NT		V	Birdwing Butterfly Vine	g	-	-	-	R - planted
<i>Parsonsia straminea</i>	APOCYNACEAE				V	Monkey Vine	g	I	-	-	O
<i>Paspalidium distans</i>	POACEAE				H	Bent Summer Grass	g	-	-	-	O
<i>Paspalum distichum</i>	POACEAE				H	Water Couch	g	-	-	-	O
<i>Paspalum mandiocanum</i> *	POACEAE		LC		H	Broadleaf Paspalum.	g	-	-	-	C/A
<i>Paspalum urvillei</i> *	POACEAE				H	Vasey Grass	g	-	-	-	O/C
<i>Passiflora edulis</i> *	PASSIFLORACEAE	193	LC		V	Passionfruit	g	-	-	-	U
<i>Passiflora suberosa</i> *	PASSIFLORACEAE		LC		V	Small Passion Flower	g	-	-	-	C
<i>Patersonia glabrata</i>	IRIDACEAE				H	Native Iris, Leafy Purple Flag	g	-	-	-	R
<i>Persicaria strigosa</i>	POLYGONACEAE				H	Spotted Knotweed	g	-	-	-	U
<i>Persoonia stradbrokeensis</i>	PROTEACEAE				SH	Broad-leaf Geebung	g	-	-	-	U
<i>Persoonia virgata</i>	PROTEACEAE				SH	Narrow-leaf Geebung	-	I	-	-	O
<i>Phyllanthus microcladus</i>	PHYLLANTHACEAE				SH	Small-leaf Phyllanthus	-	I	-	-	O
<i>Phyllanthus tenellus</i> *	PHYLLANTHACEAE				H	Long-stalked Phyllanthus	g	-	-	-	O
<i>Pliiodistigma rhytidispermum</i>	MYRTACEAE				ST	Small Leaf Plum Myrtle	g	I	-	-	C
<i>Pimelea latifolia</i>	THYMELAEACEAE				H	Forest Riceflower	-	I	-	-	O
<i>Pinus eliottii</i> *	PINACEAE		LC		T	Slash Pine	-	-	m	c	U
<i>Pittosporum multiflorum</i>	PITTOSPORACEAE				SH	Orange Thorn	g	I	-	-	U/O
<i>Pittosporum revolutum</i>	PITTOSPORACEAE				SH	Yellow Pittosporum	g	I	-	-	O
<i>Platynerium bifurcatum</i>	POLYPODIACEAE				F	Elkhorn Fern	-	-	m	-	U
<i>Platynerium superbum</i>	POLYPODIACEAE				F	Staghorn Fern	-	-	m	-	R/U

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Platylobium formosum</i>	FABACEAE				SH	Handsome Flat Pea	-	I	-	-	O/C
<i>Polygala paniculata</i> *	POLYGALACEAE				H	Milkwort	g	-	-	-	U
<i>Polymeria calycina</i>	CONVOLVULACEAE				H	Swamp Bindweed	g	-	-	-	O
<i>Polyscias elegans</i>	ARALIACEAE				T	Celery Wood	-	-	m	-	C
<i>Pomax umbellata</i>	RUBIACEAE				H	Pomax	g	-	-	-	O
<i>Pouteria chartacea</i>	SAPOTACEAE				T	Thin-leaved Coonadoo	-	I	-	-	C
<i>Pouteria queenslandica</i>	SAPOTACEAE				T	Blush Coonadoo	g	I	m	c	O
<i>Pseuderanthemum variable</i>	ACANTHACEAE				H	Love Flower	g	-	-	-	O
<i>Psidium guava</i> *	MYRTACEAE		GEP		ST	Wild Guava	-	-	m	-	R
<i>Psychotria loniceroides</i>	RUBIACEAE				SH	Rusty Psychotria	-	I	-	-	O
<i>Pteridium esculentum</i>	DENNSTAEDTIACEAE				F	Common Bracken Fern	g	-	-	-	C
<i>Pultenaea villosa</i>	FABACEAE				SH	Bronze Bush Pea	-	I	-	-	C
<i>Pyrrosia rupestris</i>	POLYPODIACEAE				F	Rock Felt Fern	-	I	m	-	U
<i>Quintinia verdonii</i>	GROSSULARIACEAE		SFS		T	Grey Possumwood	g	I	-	-	O
<i>Rhaphiolepis indica</i> *	ROSACEAE	101	GEP		ST	Indian Hawthorn	-	I	-	-	U
<i>Rhodamnia rubescens</i>	MYRTACEAE				T	Scrub Turpentine	-	I	m	-	U/O
<i>Rhodomyrtus psidioides</i>	MYRTACEAE				T	Native Guava	-	I	m	-	O
<i>Rhynchospora corymbosa</i>	CYPERACEAE				H	Corymbed Beak-sedge	g	-	-	-	U/O
<i>Richardia scabra</i> *	RUBIACEAE				H	Rough Mexican clover	g	-	-	-	U/O
<i>Ricinus communis</i> *	EUPHORBIACEAE		LC		SH	Castor Oil Plant	-	I	-	-	R
<i>Ripogonum album</i>	RIPOGANACEAE				V	White Supplejack	g	I	-	-	U
<i>Ripogonum elseyanum</i>	RIPOGANACEAE				V	Hairy Supplejack	g	-	-	-	O/C
<i>Rubus moluccanus v. moluccanus</i>	ROSACEAE				V	Molucca Bramble	g	I	-	-	O
<i>Sacciolepis indica</i>	POACEAE				H	India cupscale-grass	g	-	-	-	O
<i>Sarcopteryx stipata</i>	SAPINDACEAE				T	Steelwood	-	I	m	-	U
<i>Schefflera actinophylla</i> #	ARALIACEAE		LC		T	Umbrella Tree	-	I	m	-	U/O
<i>Schizaea dichotoma</i>	SCHIZAEACEAE				F	Branched Comb Fern	g	-	-	-	O
<i>Schizomeria ovata</i>	CUNONIACEAE				T	Crab Apple	-	I	m	-	C
<i>Schoenus melanostachys</i>	CYPERACEAE				H	Black Bog Rush	g	-	-	-	O/C
<i>Scleria levis</i>	CYPERACEAE				H	Nut Rush	g	-	-	-	O
<i>Scleria rugosa</i>	CYPERACEAE				H	Wrinkle-seed Nut Rush	g	-	-	-	O/C
<i>Scleria sphacelata</i>	CYPERACEAE				H	Wasted Nut Rush	g	-	-	-	C
<i>Scolopia braunii</i>	FLACOURTIACEAE				T	Flint Wood	g	I	m	-	O/C

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Scoparia dulcis</i> *	SCROPHULARIACEAE				H	Scoparia	g	-	-	-	U/O
<i>Sesbania cannabina</i>	FABACEAE				SH	Sesbania	-	I	-	-	U
<i>Setaria pumila</i> ssp <i>pumila</i> *	POACEAE				H	Yellow Bristlegrass	g	-	-	-	U
<i>Sida rhombifolia</i> *	MALVACEAE	153	GEP		H	Sida	g	-	-	-	U
<i>Sigesbeckia orientalis</i>	ASTERACEAE				H	Indian Weed	g	-	-	-	U/O
<i>Sloanea australis</i>	ELAEOCARPACEAE		SFS		T	Maiden's Blush	-	I	-	-	U
<i>Sloanea woollsi</i>	ELAEOCARPACEAE				T	Yellow Carrabeen	-	I	-	-	U
<i>Smilax australis</i>	SMILACACEAE				V	Austral Smilax	g	I	-	-	C
<i>Smilax glycyphylla</i>	SMILACACEAE				V	Sarsaparilla	g	I	-	-	O
<i>Solanum mauritianum</i> *	SOLANACEAE	61	GEP		ST	Wild Tobacco	-	I	-	-	U
<i>Sorgum halepense</i> *	POACEAE				H	Johnsongrass	g	-	-	-	U
<i>Spathodea campanulata</i> *	FABACEAE	190	LC	C3	T	African Tulip Tree	-	I	-	-	U
<i>Sphagneticola trilobata</i> *	ASTERACEAE	16	SM	C3	H	Singapore Daisy	g	-	-	-	C
<i>Stephania japonica</i>	MENISPERMACEAE				V	Snake Vine	g	-	-	-	O
<i>Sticherus flabellatus</i>	GLEICHENIACEAE				F	Shiny Fan Fern	g	-	-	-	O
<i>Symplocos thwaitesii</i>	SYMPLOCACEAE				T	Buff Hazelwood	-	I	-	-	U
<i>Syncarpia glomulifera</i>	MYRTACEAE				T	Turpentine	-	I	m	c	C/A
<i>Synoum glandulosum</i>	MELIACEAE				ST	Scentless Rosewood	-	I	m	-	C
<i>Syzygium ingens</i>	MYRTACEAE				T	Red apple	-	I	-	-	R
<i>Syzygium australe</i>	MYRTACEAE				T	Brush Cherry	-	-	m	-	U
<i>Syzygium luehmannii</i>	MYRTACEAE				T	Riberry	-	I	m	c	O
<i>Syzygium oleosum</i>	MYRTACEAE				T	Blue Lillypilly	-	I	m	-	O
<i>Tasmannia insipida</i>	WINTERACEAE				SH	Brush Pepper Bush	-	I	-	-	U/O
<i>Tephrosia glomulifera</i> *	FABACEAE				H	Pink Tephrosia	g	-	-	-	R/U
<i>Tetragium nitens</i>	VITACEAE				V	Three-leaved Water Vine	g	-	-	-	R
<i>Themeda triandra</i>	POACEAE				H	Kangaroo Grass	g	-	-	-	A
<i>Trema tomentosa</i>	ULMACEAE				ST	Native Peach	g	I	-	-	O
<i>Trifolium repens</i> *	FABACEAE				H	White Clover	g	-	-	-	U
<i>Trochocarpa laurina</i>	EPACRIDACEAE				T	Tree Heath	-	I	m	-	O
<i>Trophis scandens</i>	MORACEAE				V	Burny Vine	g	-	-	-	C
<i>Urena lobata</i> *	MALVACEAE				H	Pink flowered China Burr	-	I	-	-	U
<i>Verbena rigida</i> *	VERBENACEAE		GEP		H	Veined Verbena	g	-	-	-	O
<i>Viola banksii</i>	VIOLACEAE				H	Native Violet	g	-	-	-	C

Taxon	Family	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name	g	I	m	c	Abund.
<i>Wikstroemia indica</i>	THYMELAEACEAE				SH	Tie Bush	-	I	-	-	O
<i>Wilkiea huegeliana</i>	MONIMIACEAE				ST	Veiny Wilkiea	-	I	-	-	U
<i>Wilkiea macrophylla</i>	MONIMIACEAE				ST	Large-leaved Wilkiea	g	I	-	-	O/C
<i>Xanthorrhoea johnsonii</i>	XANTHORRHOACEAE				SH	Forest Black-Boy	-	I	-	-	O
<i>Xanthorrhoea macronema</i>	XANTHORRHOACEAE				SH	Saw-edged Grass tree	-	I	-	-	O/C
<i>Zieria minutiflora</i>	RUTACEAE				SH	Small Flowered Zieria	-	I	-	-	C
<i>Zieria smithii</i>	RUTACEAE				SH	Sandfly Zieria	-	I	-	-	U

## KEY TO FLORA SPECIES LISTS AND COMMUNITY STRUCTURE/FLORISTIC DATA

### Key to Flora Species List:

#### Presence/Absence in Strata and Height Levels

Presence or absence of a species at each of five strata levels (ground-lower-mid-canopy-emergent) in a community is depicted for sites:

- = Not Present in Strata      **g** = Ground Stratum (<1m)      **I** = Lower stratum (1-3m)

**m** = Midstratum (3m to subcanopy level)      **c** = Canopy

#### Abund. = Site Relative Abundance Ratings [estimation only]

**R** = Rare (< 5 plants)      **U** = Uncommon (6 -10 Plants)      **O** = Occasional (11-20 plants)      **C** = Common (21-30 plants)

**A** = Abundant (>31 plants)      **[Dist]** = Disturbed areas (occurs in cleared and regrowth)      **R-Planted** = Rare and landscape planting

#### Growth/Life Form (G/LF)

**T** = Tree      **ST** = Small Tree      **SH** = Shrub      **SSH** = Subshrub      **V** = Vine      **H** = Herb      **F** = Fern

#### Status

**NT** = Near Threatened (NCA 1999)      **SFS** = Significant Flora Species (Sunshine Coast Council 2010)

**GEP, LC, SM** from Sunshine Coast Council, Pest Management Plan 2011-2015; see Appendix 4 for further explanation

**Qld Herb. 2002** = Queensland Herbarium, 2002 and **LP Act 2002** = Land Protection Act 2002; see Appendix 4 for further explanation

#### Descriptive Superscripts

\* = Weed or Pest plant      # = Australian native plant outside natural geographic range



## Appendix 2: Threatened Flora Species

(Within a 25km radius of the Study Area; from DERM 2011b)

Family	Taxon	Common Name	Q	A
Acanthaceae	<i>Graptophyllum reticulatum</i>	reticulated holly	E	E
Apocynaceae	<i>Marsdenia coronata</i>	slender milkvine	V	V
Apocynaceae	<i>Marsdenia hemiptera</i>	rusty vine	NT	
Apocynaceae	<i>Parsonsia largiflorens</i>		E	
Apocynaceae	<i>Parsonsia tenuis</i>	slender silkpod	V	
Aponogetonaceae	<i>Aponogeton elongatus subsp. elongatus</i>		NT	
Aristolochiaceae	<i>Pararistolochia praevenosa</i>		NT	
Bignoniaceae	<i>Tecomanthe hillii</i>	Fraser Island creeper	NT	
Blandfordiaceae	<i>Blandfordia grandiflora</i>	christmas bells	E	
Burmanniaceae	<i>Thismia rodwayi</i>		NT	
Caesalpiniaceae	<i>Senna acclinis</i>		NT	
Casuarinaceae	<i>Allocasuarina emuina</i>	Mt. Emu she-oak	E	E
Casuarinaceae	<i>Allocasuarina filidens</i>	Mt. Beerwah she-oak	NT	
Casuarinaceae	<i>Allocasuarina thalassoscopica</i>	Mt. Coolum she-oak	E	E
Corynocarpaceae	<i>Corynocarpus rupestris subsp. arborescens</i>	southern corynocarpus	V	
Cucurbitaceae	<i>Nothoalsomitra suberosa</i>		NT	
Cyperaceae	<i>Schoenus scabripes</i>		NT	
Ericaceae	<i>Leucopogon recurvisepalus</i>		E	
Euphorbiaceae	<i>Bertya sharpeana</i>	Mt. Coolum bertya	NT	
Euphorbiaceae	<i>Ricinocarpus speciosus</i>		V	
Haloragaceae	<i>Gonocarpus effusus</i>		NT	
Lamiaceae	<i>Plectranthus torrenticola</i>		E	E
Lamiaceae	<i>Westringia blakeana</i>		NT	
Lamiaceae	<i>Westringia grandifolia</i>		E	
Lauraceae	<i>Cryptocarya foetida</i>	stinking cryptocarya	V	V
Laxmanniaceae	<i>Romnaldia strobilacea</i>		V	V
Mimosaceae	<i>Acacia attenuata</i>		V	V
Mimosaceae	<i>Acacia baueri subsp. baueri</i>	tiny wattle	V	
Myrtaceae	<i>Choricarpia subargentea</i>	giant ironwood	NT	
Myrtaceae	<i>Eucalyptus conglomerata</i>	swamp stringybark	E	E
Myrtaceae	<i>Eucalyptus curtisii</i>	Plunkett mallee	NT	
Myrtaceae	<i>Eucalyptus kabiana</i>	Mt. Beerwah mallee	V	V
Myrtaceae	<i>Gossia fragrantissima</i>		E	E
Myrtaceae	<i>Gossia inophloia</i>		NT	
Myrtaceae	<i>Lenwebbia sp. (Blackall Range P.R.Sharpe 5387)</i>		E	
Myrtaceae	<i>Leptospermum luehmannii</i>		V	
Myrtaceae	<i>Leptospermum oreophilum</i>		V	
Myrtaceae	<i>Melaleuca groveana</i>		NT	
Myrtaceae	<i>Syzygium hodgkinsoniae</i>	red lilly pilly	V	V
Oleaceae	<i>Jasminum jenniae</i>		E	
Orchidaceae	<i>Genoplesium cranei</i>		V	
Orchidaceae	<i>Genoplesium sigmoideum</i>		NT	
Orchidaceae	<i>Papillilabium beckleri</i>		NT	
Orchidaceae	<i>Phaius australis</i>		E	E
Orchidaceae	<i>Prasopphyllum exilis</i>		NT	
Orchidaceae	<i>Prasopphyllum wallum</i>	Wallum leek orchid	V	V
Orchidaceae	<i>Pterostylis nigricans</i>		NT	
Orchidaceae	<i>Sarcophilus fitzgeraldii</i>	ravine orchid	E	V

Family	Taxon	Common Name	Q	A
Orchidaceae	<i>Taeniophyllum muelleri</i>		C	V
Poaceae	<i>Arundinella montana</i>	mountain reed grass	NT	
Proteaceae	<i>Banksia conferta</i>		V	
Proteaceae	<i>Floydia praealta</i>	ball nut	V	V
Proteaceae	<i>Grevillea hodgei</i>		V	
Proteaceae	<i>Helicia ferruginea</i>	rusty oak	V	
Proteaceae	<i>Macadamia integrifolia</i>	macadamia nut	V	V
Proteaceae	<i>Macadamia janseni</i>		E	E
Proteaceae	<i>Macadamia ternifolia</i>	bopple nut	V	V
Proteaceae	<i>Macadamia tetraphylla</i>		V	V
Proteaceae	<i>Triunia robusta</i>		E	E
Rubiaceae	<i>Durringtonia paludosa</i>	durringtonia	NT	
Rutaceae	<i>Boronia rivularis</i>	Wide Bay boronia	NT	
Rutaceae	<i>Bosistoa transversa</i>	three-leaved bosistoa	C	V
Rutaceae	<i>Zieria bifida</i>		E	E
Rutaceae	<i>Zieria exsul</i>		E	
Sapindaceae	<i>Dodonaea rupicola</i>		V	V
Sapindaceae	<i>Lepiderema pulchella</i>	fine-leaved tuckeroo	V	
Sapotaceae	<i>Planchonella eerwah</i>		E	E

**Key:**

Qld	Queensland legislation ( <i>NCA 1992</i> )
Aust	Commonwealth legislation ( <i>EPBC Act 1999</i> )
E	Endangered ( <i>NCA 1992</i> and <i>EPBC Act 1999</i> )
V	Vulnerable ( <i>NCA 1992</i> and <i>EPBC Act 1999</i> )
NT	Near Threatened ( <i>NCA 1992</i> )
C	Common ( <i>NCA 1992</i> )

## Appendix 3: Possible Threatened Flora Species that may occur within the Study Area (from DERM 2011b)

Family	Taxon	Common Name	Q	A
Apocynaceae	<i>Marsdenia coronata</i>	slender milkvine	V	V
Aristolochiaceae	<i>Pararistolochia praevenosa</i>		NT	
Caesalpiniaceae	<i>Senna acclinis</i>		NT	
Myrtaceae	<i>Syzygium hodgkinsoniae</i>	red lilly pilly	V	V
Rutaceae	<i>Zieria bifida</i>		E	E

### Key:

Qld	Queensland legislation ( <i>NCA 1992</i> )
Aust	Commonwealth legislation ( <i>EPBC Act 1999</i> )
E	Endangered ( <i>NCA 1992</i> and <i>EPBC Act 1999</i> )
V	Vulnerable ( <i>NCA 1992</i> and <i>EPBC Act 1999</i> )
NT	Near Threatened ( <i>NCA 1992</i> )
C	Common ( <i>NCA 1992</i> )

## Appendix 4: Weed Species

Taxon	FamilyFAMILY	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name
<i>Ageratina riparia</i> *	ASTERACEAE	25	LC		H	Mist Flower
<i>Ageratum houstonianum</i> *	ASTERACEAE	115	GEP		H	Blue Top
<i>Archontophoenix alexandrae</i> #	ARECACEAE		GEP		T	Alexander Palm
<i>Ardisia crenata</i> *	MYRSINACEAE		LC		SH	Coral Berry
<i>Bidens pilosa</i> *	ASTERACEAE	110	LC		H	Pitchforks
<i>Brachiaria decumbens</i> *	POACEAE		GEP		H	Signalgrass
<i>Chloris virgata</i> *	POACEAE				H	Feathertop rhodes grass
<i>Cinnamomum camphora</i> *	LAURACEAE	8	LC	C3	T	Camphor Laurel
<i>Conyza canadensis</i> *	ASTERACEAE	179			H	Canadian Fleabane
<i>Crassocephalum crepidioides</i> *	ASTERACEAE				H	Thickhead
<i>Crotalaria incana</i> *	FABACEAE				H	Shack shack
<i>Crotalaria lanceolata</i> *	FABACEAE				H	lance leaf rattlebox
<i>Cyperus eragrostis</i> *	CYPERACEAE				H	Umbrella Sedge
<i>Dactyloctenium aegyptium</i> *	POACEAE				H	Egyptian crowfoot grass
<i>Desmodium uncinatum</i> *	FABACEAE	64	LC		V	Silver leaf Desmodium
<i>Diospyros kaki</i> *	EBENACEAE				ST	Wild Persimmon
<i>Echinochloa colona</i> *	POACEAE				H	Awnless barnyard grass
<i>Echinochloa crus-galli</i> *	POACEAE		GEP		H	Barn yard grass
<i>Eleusine indica</i> *	POACEAE		GEP		H	Crow's foot Grass
<i>Gomphrena celosioides</i> *	AMARANTHACEAE				H	Gomphrena weed
<i>Hypochaeris radicata</i> *	ASTERACEAE				H	Cat's Ears
<i>Indigofera suffruticosa</i> *	FABACEAE				SH	Small-leaved indigo
<i>Ipomoea indica</i> *	CONVOLVULACEAE		SM		V	Blue Marning Glory
<i>Kummerowia striata</i> *	FABACEAE				H	Japanese clover
<i>Lagerstroemia indica</i> *	LYTHRACEAE				T	Crepe Myrtle
<i>Lantana camara</i> *	VERBENACEAE	1	LC	C3	SH	Lantana
<i>Macroptilium atropurpureum</i> *	FABACEAE	51	LC		V	Siratro
<i>Macrotyloma axillaris</i> *	FABACEAE		LC		V	A Cow Pea
<i>Mangifera indica</i> *	ANACARDIACEAE				T	Mango
<i>Megathyrsus maximus</i> *	POACEAE	20	SM/LC		H	Guinea Grass
<i>Melinis minutiflora</i> *	POACEAE		LC		H	Molasses Grass
<i>Melinis repens</i> *	POACEAE		GEP		H	Red Natal Grass
<i>Ochna serrulata</i> *	OCHNACEAE	22	LC		SH	Mickey Mouse Bush
<i>Oxalis corniculata</i> *	OXALIDACEAE				H	Oxalis
<i>Paspalum mandiocanum</i> *	POACEAE		LC		H	Broadleaf Paspalum
<i>Paspalum urvillei</i> *	POACEAE				H	Vasey Grass
<i>Passiflora edulis</i> *	PASSIFLORACEAE	193	LC		V	Passionfruit
<i>Passiflora suberosa</i> *	PASSIFLORACEAE		LC		V	Small Passion Flower
<i>Phyllanthus tenellus</i> *	PHYLLANTHACEAE				H	Long-stalked Phyllanthus
<i>Pinus elliotii</i> *	PINACEAE		LC		T	Slash Pine
<i>Polygala paniculata</i> *	POLYGALACEAE				H	Milkwort
<i>Psidium guava</i> *	MYRTACEAE		GEP		ST	Wild Guava
<i>Raphiolepis indica</i> *	ROSACEAE	101	GEP		ST	Indian Hawthorn
<i>Richardia scabra</i> *	RUBIACEAE				H	Rough Mexican clover
<i>Ricinis communis</i> *	EUPHORBIACEAE		LC		SH	Castor Oil Plant
<i>Schefflera actinophylla</i> #	ARALIACEAE		LC		T	Umbrella Tree
<i>Scoparia dulcis</i> *	SCROPHULARIACEAE				H	Scoparia
<i>Setaria pumila ssp pumila</i> *	POACEAE				H	Yellow Bristlegrass
<i>Sida rhombifolia</i> *	MALVACEAE	153	GEP		H	Sida

Taxon	FamilyFAMILY	Qld Herb. (2002)	Status	LP Act 2002	G/F	Common Name
<i>Solanum mauritianum</i> *	SOLANACEAE	61	GEP		ST	Wild Tobacco
<i>Sorghum halepense</i> *	POACEAE				H	Johnsongrass
<i>Spathodea campanulata</i> *	FABACEAE	190	LC	C3	T	African Tulip Tree
<i>Sphagneticola trilobata</i> *	ASTERACEAE	16	SM	C3	H	Singapore Daisy
<i>Tephrosia glomulifera</i> *	FABACEAE				H	Pink Tephrosia
<i>Trifolium repens</i> *	FABACEAE				H	White Clover
<i>Urena lobata</i> *	MALVACEAE				H	Pink flowered China Burr
<i>Verbena rigida</i> *	VERBENACEAE		GEP		H	Veined Verbena

### Key to Weed Species Table

<b>Ranking Number (Queensland Herbarium 2002)</b> 1 to 200					
<b>Status (Sunshine Coast Council 2011- 2015)</b> <b>SM</b> Strategic Management <b>LC</b> Local Control <b>GEP</b> General Environmental Pest					
<b>LP Act 2002 (Land Protection Act 2002)</b> <b>C3</b> Class 3 Declared Plant					
<b>Growth/Life Form (G/LF)</b> <b>T</b> = Tree <b>SH</b> = Shrub <b>ST</b> = Small Tree <b>V</b> = Vine <b>H</b> = Herb <b>F</b> = Fern					
<b>Descriptive Superscripts</b> * = Weed or Pest plant                      # = Australian native plant outside natural geographic range					

# Appendix 5: Plates

**Plates 1 and 2: Vegetation Community 1.**

[Garry Thomas photos]



**Plates 3, 4 and 5: Vegetation Community 2.**

[Garry Thomas photos]





**Plates 6 and 7: Vegetation Community 3.** [Garry Thomas photos]



**Plate 8 and 9: Disturbed-Regrowth Area.**

Southern Boundary [Garry Thomas photos]



**Plate 10: *Pararistolochia praevenosa* on creek line.**

Notice planting tube [Garry Thomas photos]

