

5.4. COCONUT ACTION PLAN 2016/2017

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RECOMMENDATION

That Council adopt the Coconut Action Plan 2016/2017 to ensure that there is clear direction for the management and maintenance of coconuts (*Cocos nucifera*) on Council controlled lands.

EXECUTIVE SUMMARY

Council adopted the Coconut Management Plan in 2015. In adopting the Plan, Council resolved that an annual action plan will be developed to detail the individual actions to be taken over each successive 12-month period. The Coconut Action Plan 2016/2017 provides open and transparent information to all stakeholders regarding operational actions and maintenance over the 2016/2017 financial year. The action plan clearly outlines the projects to be completed, and documents the actions to be taken to progress the outcomes outlined in the Coconut Management Plan 2015.

BACKGROUND

On the 18th August 2015 Council adopted the Coconut Management Plan and Coconut Action Plan 2015/2016. The Plan provides Council officers with the necessary tools to classify coconut palms against a risk based approach, including their location, the risk they pose and their overall condition. The assessment tool is necessary for ensuring effective and efficient operational and maintenance based activities.

The document includes provisions for stakeholders to appeal against the removal of coconut palms and to enter into maintenance agreements with Council to take over the maintenance (de-nutting) of certain palms. To date, Council has entered into five (5) separate agreements with landholders; four (4) at Newell Beach and one (1) business-based in Port Douglas.

The plan provides all stakeholders, including Councilors, Council staff and the general public with a clear policy and understanding of the processes to be followed in order to make informed decisions regarding coconut management.

COMMENT

The actions proposed in the Coconut Action Plan 2016/2017 are summarised into four categories:

1. **Coconut de-nutting program** – A total of 1,445 coconut palms have been identified for maintenance with an additional 5 palms added and 12 palms removed from the de-nutting program over 2015/2016;
2. **Removal of high risk specimens for public safety** - Table 1 below details the coconuts scheduled to be removed for public safety and environmental outcomes over the 2016/2017 financial year.

Table 1- Removals

| Area | Location | Reason | Number of Palms | Map/ Figure Reference |
|--------------|----------------------------|----------------------------|-----------------|-----------------------|
| Wonga Beach | Pathway Gardenia Close | High risk to public safety | 5 | Map 11 / Figure 1 |
| Miallo | Cook Highway Miallo | High risk to public safety | 3 | Map 12 / Figure 2 |
| Mossman | North Mossman Park | High risk to public safety | 6 | Map 13 / Figure 3 |
| | Coral Sea Drive | Over service wire | 2 | Map 14 / Figure 4 |
| | Hart Street | Inappropriate Streetscape | 1 | Map 15 / Figure 5 |
| Cooya Beach | Cooya Beach Esplanade | Defective/ unsafe | 3 | Map16 / Figure 6 |
| Killae | Ocean View Road | Inappropriate Streetscape | 40 | Map 17 / Figure 7 |
| Port Douglas | Fourmile Park (Barrier St) | High risk to public safety | 2 | Map 18 / Figure 8 |
| | Behind Solander Bvd | Environmental | 6 | Map 19 / Figure 9 |
| | Davidson Street | Defective / unsafe | 1 | Map 20/Figure 10 |
| Oak Beach | Pathway Oak Street | Defective / unsafe | 1 | Map 21 / Figure11 |
| Total | | | 70 | |

3. **Environmental control and restoration projects** - Three separate restoration projects are to be completed in 2016/2017:
 - i. Fourmile Beach Esplanade;
 - ii. Sheraton Resort Foreshore; and
 - iii. Germination control Daintree Lowlands.
4. **Landholder maintenance agreements** - provisions for stakeholders to appeal against the removal of coconut palms and to enter into maintenance agreements with Council to take over the maintenance (de-nutting) of certain palms. Council has identified the southern Newell Beach precinct as a priority area.

PROPOSAL

It is recommended that Council adopt the Coconut Action Plan 2016/2017. Adopting the plan will help ensure that there is a clear direction for the management and maintenance of coconuts (*Cocos nucifera*) on Council controlled lands. Such management will lower the risk of injury from falling nuts and ensure that important natural areas are protected from being impacted by coconut palms.

FINANCIAL/RESOURCE IMPLICATIONS

The operational costs of de-nutting and removal has been allocated in the 2016/2017 Council operational budget. Over the past 12 months, Council has benefitted from a reduction in the contract rate for de-nutting due to Council undertaking a public tender process and signing a new service contract.

It is not envisaged that additional staff or resources will be required in the implementation of the Coconut Action Plan 2016/2017. All inspections and assessments will remain the responsibility of the Open Spaces Team Leaders.

RISK MANAGEMENT IMPLICATIONS

By utilising the tools now approved in the Coconut Management Plan 2015, Council Officers will be able to undertake condition and risk assessments which will help to reduce Council's exposure to hazards posed by coconut palms. This documentation is vital in ensuring council's compliance and fulfilling our responsibilities to public health and safety, meeting auditing requirements and ultimately reducing Council's exposure to public liability claims.

Council must be able to demonstrate that we have inspection processes and procedures in place to reduce hazards across the Shire. The Coconut Action Plan 2016/2017 highlights the actions required to implement the appropriate remedial works to fulfil Council's responsibilities.

SUSTAINABILITY IMPLICATIONS

Economic: The current cost of coconut management is \$217,000. Since implementing the Coconut Management Plan 2015 substantial savings (\$35,000) have been made in the past financial year. The savings were achieved from a reduction in the contract rate for de-nutting services due to the competitive market price between local suppliers. The cost of effective coconut management is expected to rise into the future if the Coconut Action Plan 2016/2017 is not adopted.

Environmental: The adopted Coconut Management Plan 2015 raises concerns about coconut tree impacts on Environmental Protection and Biodiversity Conservation Act (EPBC) listed littoral rainforest. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Terrain Natural Resources and Mines (NRM) *2014 Mapping Littoral Rainforest & Coastal Vine Thickets of Eastern Australia in the Wet Tropics: Mission Beach Pilot Study* identified coconut trees (*Cocos nucifera*) as transformer weeds in littoral rainforest in the pilot area, and recommended that transformer species in littoral rainforests in the Wet Tropics be given appropriate weight by government in considering funding applications for control.

The Douglas region contains many examples of Littoral Rainforest, an EPBC listed coastal vegetation community shared along the eastern Australian coast but with specific character and significance in the Wet Tropics and Douglas area. It provides much of the essential 'where the rainforest meets the reef' character for which the region is famous.

The failure of the management of coconut palms in these ecosystems is advocating the demise of a critically endangered ecosystem.

Social: Our improved systems now allow Council to track progress, have measurable outcomes on clear and specific goals. The risk and condition assessment tools for making decisions will provide Council staff the ability to deliver services efficiently, provide accountability and engage with the community.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2014-2019 Initiatives:

Theme 3 - Improve Environmental Performance

3.1.3 - Develop management plans for Council's parks and reserves including coastal reserves and foreshore areas.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Fully-Responsible Funding the full cost of a program or activity

CONSULTATION

Internal: In developing the Coconut Action Plan 2016/2017 a Council workshop with Councilors was conducted on 5 July 2016.

External: The Coconut Action Plan 2016/2017 will be made available on council's webpage if approved to provide information and awareness to the community.

COMMUNITY ENGAGEMENT

A community engagement process has recently been undertaken with the key stakeholders of Ocean View Road to obtain a clear understanding of the opinions of the landholders effected by the coconuts proposed for removal in the streetscape. In July, written correspondence was mailed to each landowner of Ocean View Road asking whether they agree or disagree with the proposal to remove and replace the coconuts in the street. The landowners were also asked whether they would enter into an agreement with Council to take over the maintenance, should they appeal the decision to remove the coconuts.

Of the twenty-two (22) letters that were sent to landowners, Council received 13 responses. Of these, ten (10) agreed with the proposed removal and four (4) disagree with the proposed removal (one resident ticked both boxes). All four landowners who disagreed with the proposal indicated that they were willing to enter into an agreement with Council to take over the maintenance of the coconut palms adjacent to their property.

As a result of the survey and the residents' request for a management agreement, council's intention is to proceed with the removal (40) of the coconut palms as approved by the majority of residents, and enter into maintenance agreements with the other landowners to retain the remaining palms (19) adjacent to their properties.

ATTACHMENTS

Attachment 1 - Draft Coconut Action Plan 2016/2017 - D778838



COCONUT MANAGEMENT ACTION PLAN

2016/2017

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Coconut Management Action Plan 2016 – 2017

PURPOSE

The coconut management action plan provides open and transparent information to all stakeholders regarding operational actions for the maintenance over the 2016/2017 financial year. The action plan sets out the projects to be completed which will help to achieve the coconut management plan outcomes as outlined in the Coconut Management Plan.

ACTIONS

Coconut maintenance will be split into four categories as outlined below:

1. Coconut de-nutting program;
2. Removal of high risk specimens for public safety;
3. Environmental control and restoration projects; and
4. Landholder maintenance agreements.

COCONUT DE-NUTTING PROGRAM

High risk coconut palms to be de-nutted throughout the Douglas Shire region are listed in Table 1 below. A total of 1,445 coconut palms have been identified for maintenance with an additional 5 palms added and 12 removed from the de-nutting program over the last period. De-nutting occurs twice annually and the estimated cost of de-nutting is \$165,000 in 2016/2017. The photo below shows one of the methods for de-nutting; climbing the tree and pruning by hand. The second method employed by Council is to erect an elevated platform. Council's preference is to use elevated platforms as climbing the trees causes scarring to the surface due to the spiked shoes worn by the climber. Figure 1 below shows the relevant maps of coconut location to be de-nutted.



Table 1 - Coconut De-nutting Program

| Area | Address | Location | No. of trees |
|---------------------|--------------------------|---|--------------|
| Port Douglas | | | |
| 1 | Capt Cook Highway | Near Paws & Claws | 3 |
| 2 | Nautilus St | Centre Island between Mitre and Reef Sts | 33 |
| 3 | Cowrie/Helmet Sts | Foreshore area between Cowrie & Helmet Sts | 76 |
| 4 | Barrier St | Cnr with Tropic Court. | 1 |
| 5 | Barrier St | Four Mile Park including Outrigger access northern side | 20 |
| 6 | Pecton Ave | Footpath | 4 |
| 7 | Triton Cres | Footpath | 1 |
| 8 | Little Reef St | East side | 11 |
| 9 | Port Douglas Road | Outside Medical Centre on cnr with Barrier St | 3 |
| 10 | Solander Blvd | Bruno Reidwig Park | 54 |
| 11 | Davidson St Service Road | Port to Mahogany includes 2 south of Fire Station | 15 |
| 12 | Ti Tree St | Cnr with Mahogany and in Ti tree St | 5 |
| 13 | Grant St | Rotary Park | 2 |
| 14 | Warner St | Between Grant & Wharf Sts | 1 |
| 15 | Wharf St | Over path Adjacent to Coast Guard Only | 1 |
| 16 | Wharf St | Rex Smeal Park includes Little Cove | 37 |
| 17 | Wharf St | Market Park | 85 |
| 18 | Wharf St | Market Park Carpark | 5 |
| 19 | Dixie St | Park next to Sugar Wharf | 33 |
| 20 | Ashford Ave | Park next to Boatramp | 3 |
| 21 | Ashford Ave | Boatramp next to Combines Club | 5 |
| 22 | Macrossan St | Jalun Park | 34 |
| 23 | Macrossan St | Davidson St to Jalun Park | 18 |
| 24 | Port Douglas Esplanade | Macrossan to Mowbray Sts including near Toilets | 79 |
| 25 | Garrick St | Macrossan to Sand St | 27 |
| 26 | Garrick St | Jalunbu Park | 6 |
| 27 | Garrick St | Southern end beach access | 5 |
| 28 | Sand St | Tide to Beryl Sts | 9 |
| 29 | Sand St | Southern Beach access | 1 |
| 30 | Davidson St | Reynolds Park near CWA Hall | 6 |
| 31 | Beryl St | Central Plaza | 9 |
| 32 | Davidson St | Mowbray to Macrossan Sts | 9 |
| 33 | Port Douglas Road | In front of QT | 24 |
| Oak Beach | | | |
| 34 | Oak Beach Rd | Northern Car park beach access | 10 |
| 35 | Oak Beach Rd | Pathway between Nos. 15 & 17 | 13 |
| Killaloe | Killaloe | | |
| 36 | Ocean View Rd | | 40 |
| Mossman | Park St | Road verge of caravan park | 5 |
| Cooya Beach | | | |
| | Bouganvillea St | Foreshore area / Esplanade | 305 |

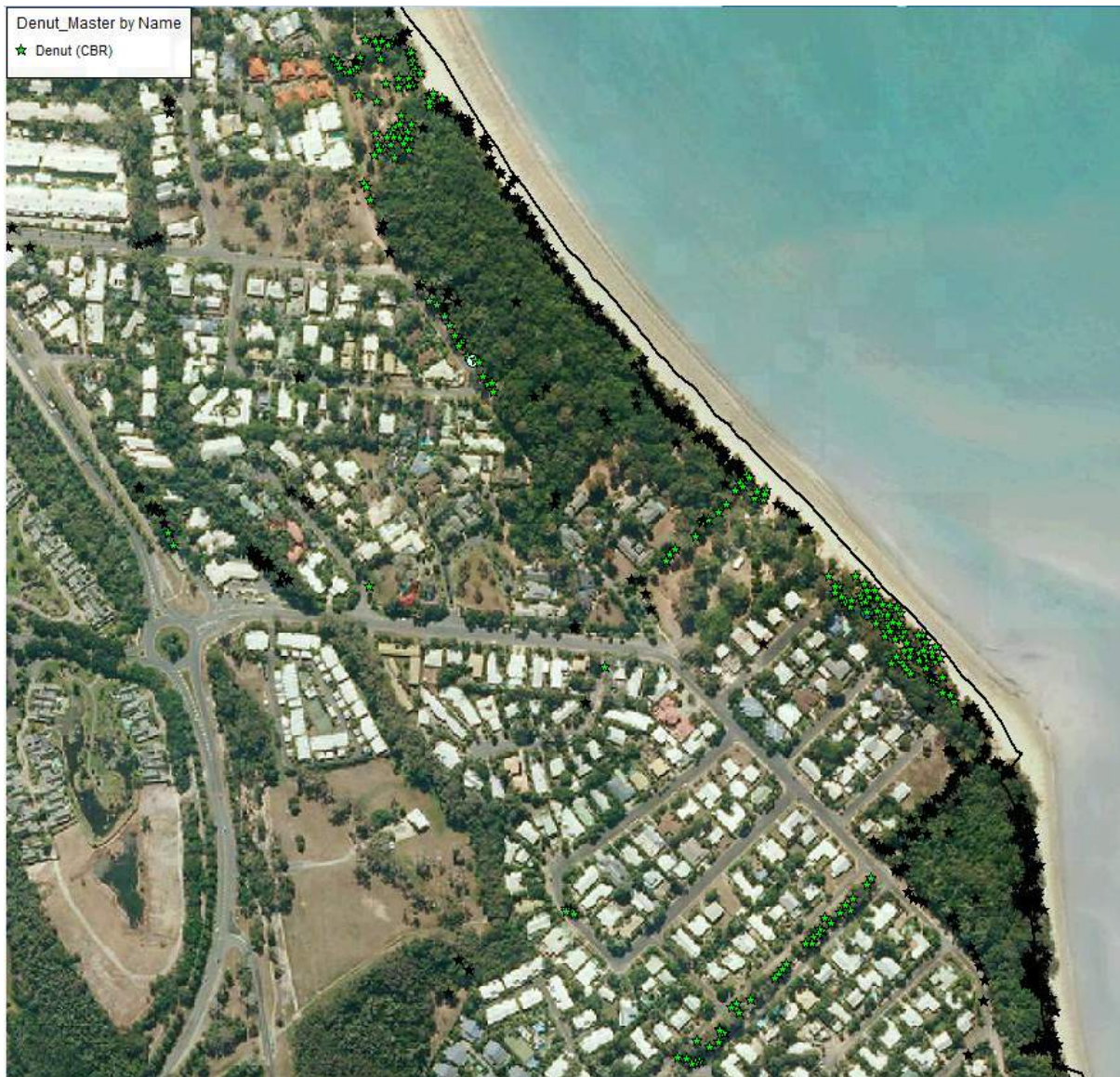
| Area | Address | Location | No. of trees |
|-------------------------|---------------------|--|--------------|
| | Albatross Cl | On corner in front of flats | 3 |
| Newell Beach | | | |
| | Esplanade | Mown area of foreshore | 144 |
| | Rankin St | Boat ramp car park | 9 |
| | Marine Pde | Outside number 9 Executive Retreat | 1 |
| Rocky Point | | | |
| | Daintree Rd | Park opposite Rocky Point School Road | 8 |
| | Daintree Rd | Boat ramp car park | 1 |
| Wonga Beach | | | |
| | New Wonga Esplanade | Foreshore area | 170 |
| | Old Wonga Esplanade | Foreshore area | 87 |
| | Oleander Drv | Opposite Yarun Cl | 2 |
| | Oleander Drv | Corner of Oleander Drv and Marlin Drv | 2 |
| Daintree Ferry | | | |
| | Southern ramp | Both sides of ramp | 9 |
| | Northern ramp | Near boat loading bay | 3 |
| Cape Tribulation | | | |
| | Cape Tribulation Rd | Beach access old Coconut Beach Resort | 2 |
| | Cape Tribulation Rd | Southern Bank of Thompson Creek causeway | 3 |
| | Cape Tribulation Rd | In front of Whet Restaurant | 3 |
| Total | | | 1445 |

FIGURE 1 – Area map locations of Coconuts to be de-nutted

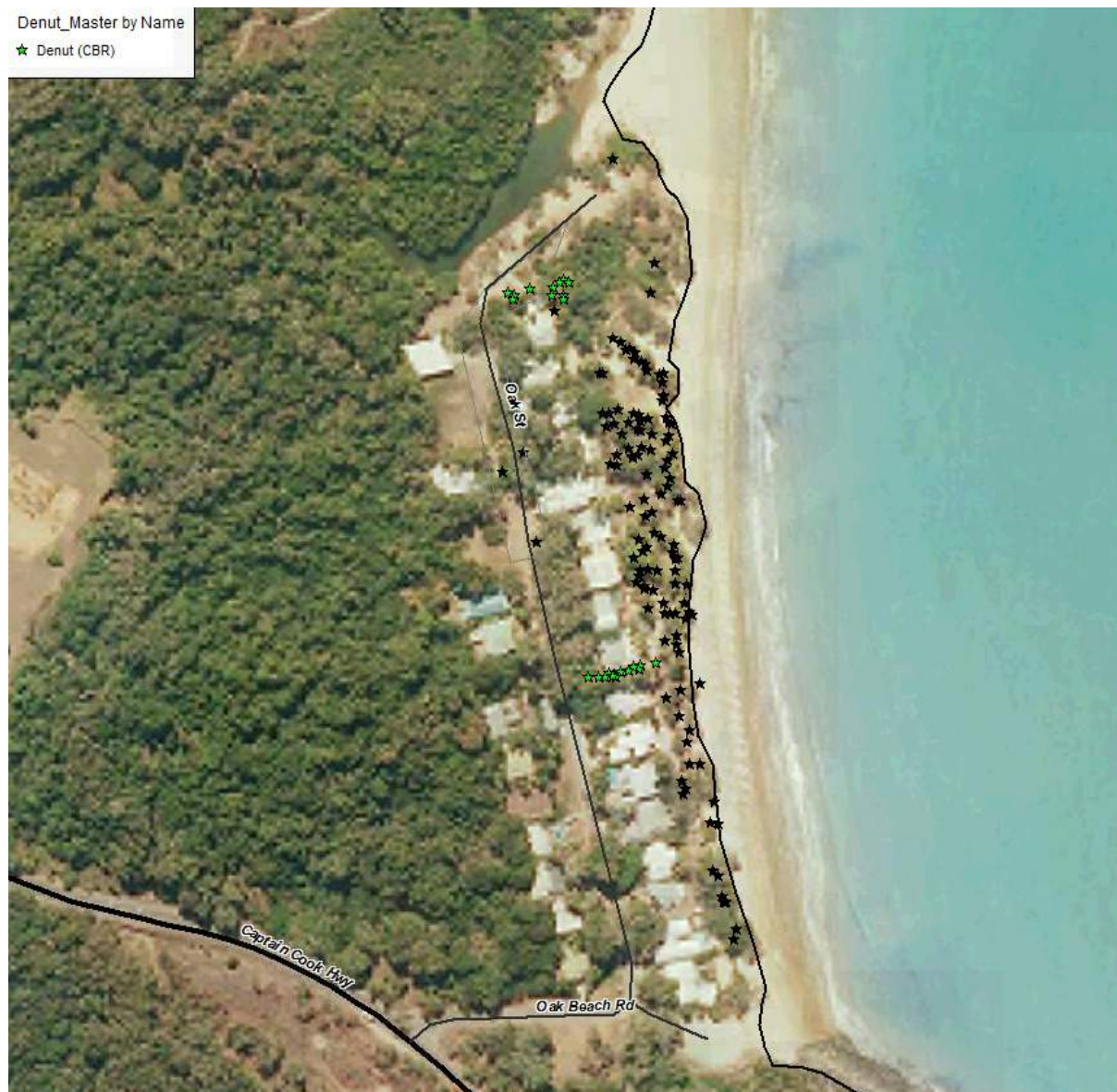
Map 1 – Port Douglas CBD



Map 2 – Four Mile Area



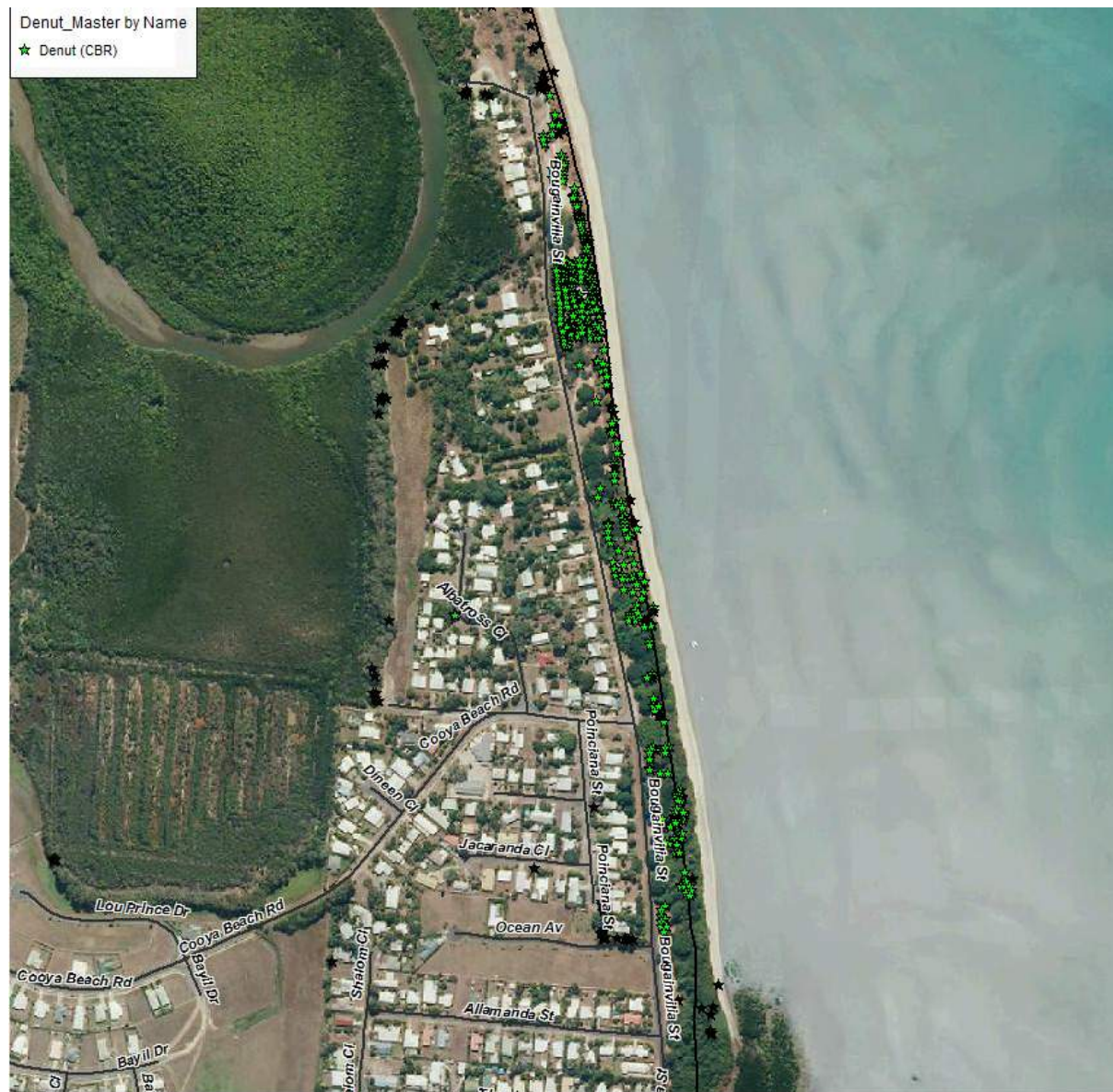
Map 3 – Oak Beach



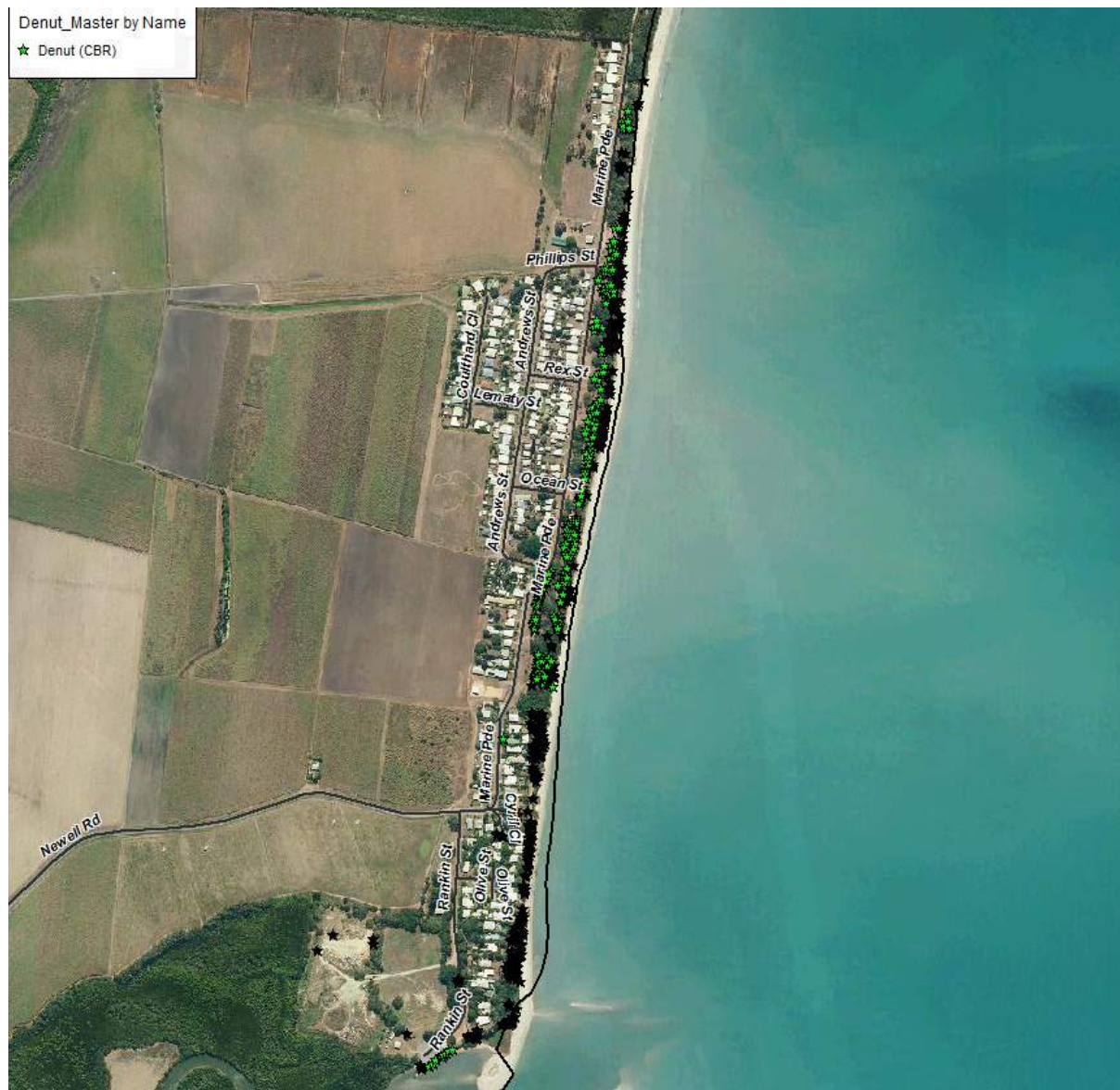
Map 4 – Killaloe Area – Ocean View Road



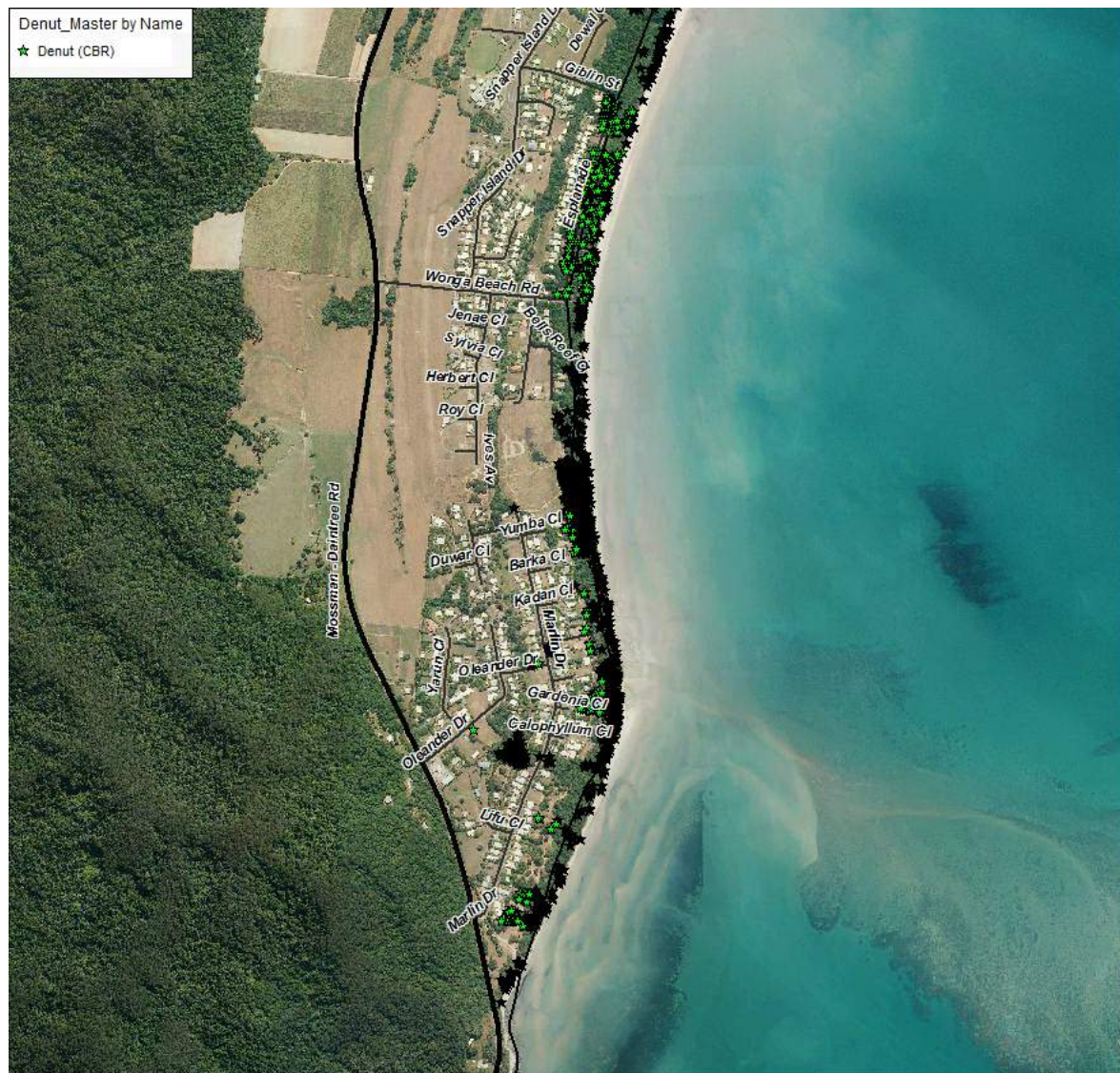
Map 5 – Cooya Beach



Map 6 – Newell Beach



Map 7 – Wonga Beach



Map 8 – Rocky Point



Map 9 – Daintree Ferry



Map 10 – Cape Tribulation



REMOVAL

Table 2 below details coconuts scheduled to be removed for public safety and Figure 2 shows the relevant maps of coconuts to be removed.

Table 2 – Proposed Coconuts to be removed

| Area | Location | Reason | Number of Palms | Map/ Figure Reference |
|--------------|----------------------------|----------------------------|-----------------|-----------------------|
| Wonga Beach | Pathway Gardenia Close | High risk to public safety | 5 | Map 11 / Figure 1 |
| Miallo | Cook Highway Miallo | High risk to public safety | 3 | Map 12 / Figure 2 |
| Mossman | North Mossman Park | High risk to public safety | 6 | Map 13 / Figure 3 |
| | Coral Sea Drive | Over service wire | 2 | Map 14 / Figure 4 |
| | Hart Street | Inappropriate Streetscape | 1 | Map 15 / Figure 5 |
| Cooya Beach | Cooya Beach Esplanade | Defective/ unsafe | 3 | Map16 / Figure 6 |
| Killaloe | Ocean View Road | Inappropriate Streetscape | 40 | Map 17 / Figure 7 |
| Port Douglas | Fourmile Park (Barrier St) | High risk to public safety | 2 | Map 18 / Figure 8 |
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| | Davidson Street | Defective / unsafe | 1 | Map 20/ Figure 10 |
| Oak Beach | Pathway Oak Street | Defective / unsafe | 1 | Map 21 / Figure11 |
| Total | | | 70 | |



Figure 1 – High risk coconuts over pathway Gardenia Cl (Nuts and Fronds)



Figure 2 – High risk to public safety Captain Cook Highway Miallo



Figure 3 – High risk to public safety North Mossman Park



Figure 4 – Over Service wire Coral Sead Drive (inappropriate Streetscape)



Figure 5 – High risk to public safety Hart Street Mossman



Figure 6 – High Risk defected palm termite infested at Cooya Beach Esplanade

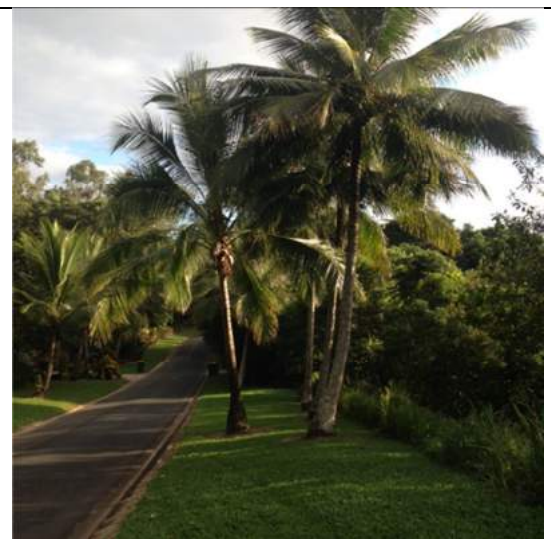


Figure 7 – Ocean View Road (Inappropriate Streetscape)



Figure 8 – High Risk to public safety Fourmile Park



Figure 9 - Behind Solander Bvd (environmental)



Figure 10 – Risk defective palm in Davidson Street



Figure 11 – High risk defective palm at Oak Beach

FIGURE 2 – Location maps of coconuts to be removed

Map 11 – Wonga Beach Area -Gardenia Close and Janbal Street



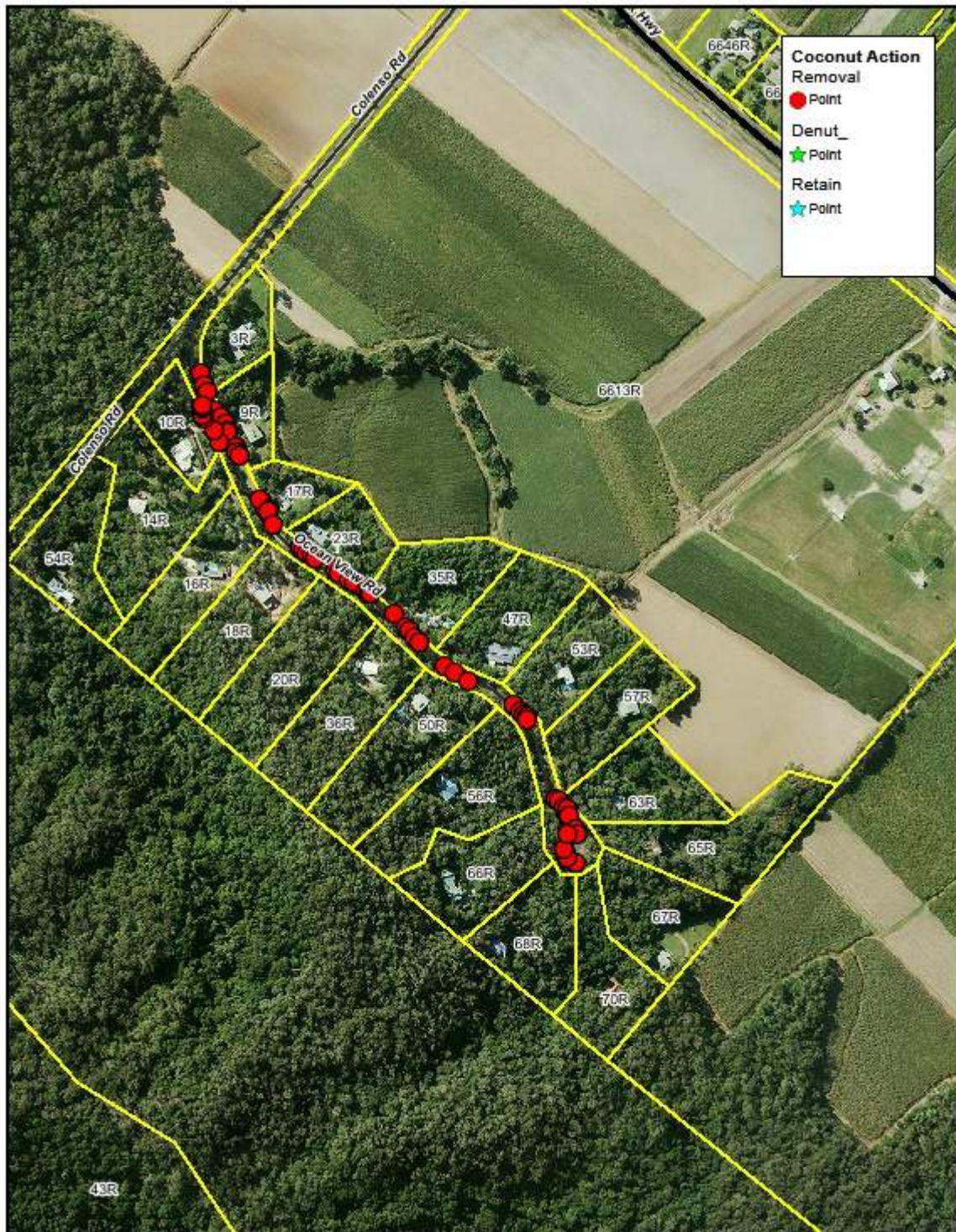
Map 12 – Miallo - Captain Cook Highway

Map 13 – North Mossman Park

Map 14 – Coral Sea Drive

Map 15 – Mossman – Hart Street

Map 16 – Cooya Beach Esplanade

Map 17 – Killaoe – Ocean View Road

Map 18 – Four Mile Park Barrier Street



Map 19 – Behind Solander Boulevard

Map 20 – Port Douglas Davidson Street



Map 21 – Oak Beach Pathway

ENVIRONMENTAL CONTROL AND RESTORATION PROJECTS

Three separate restoration projects are proposed to be completed in 2016/2017 and are listed below:

1. Four Mile Beach Esplanade site;
2. Sheraton Resort Foreshore Restoration; and
3. Germination control Daintree lowlands.

Site 1 – Four Mile Beach Esplanade (Carried over from 2015/2016 due to Native title claim)

This site is located directly adjacent to the Sands Property Development. Works were commenced on site in 2012 whilst under the management of Cairns Regional Council (CRC). A stop work order was placed on the revegetation crew at the time following the removal of mature coconuts. The stop work order was to remain in place until the matter was resolved. The proposed revegetation works as outlined in the attached Appendix 1 aims to resolve the situation and implement revegetation of the site as per the original development approval in 2002. The revegetation plan clearly details the proposed scope of works and will be done in consultation with all stakeholders as per the Community Engagement Plan attached Appendix 2.

Site2 – Sheraton Resort Foreshore (Works Commenced June 2016)

Relevant council staff and Sheraton managers met on site to discuss proposed plans to undertake coconut maintenance / improvement works on the foreshore dunes adjacent to the resort. Agreed actions at the meeting were that the Sheraton would submit a proposed scope of works for approval by council in accordance with guidelines as set out in the state governments Queensland Coastal Plan. Appendix 3 shows a draft proposal of the works to be undertaking in conjunction with council.

Site 3 - Control in the Daintree Lowlands

A trial site of littoral rainforest has been chosen north of the river based on environmental significance. A site inspection of Cowie Beach was recently conducted by Jabalbinna Rangers to assess the impacts of coconuts on littoral rainforest and cultural values. Further discussions with the elders will occur to seek agreement on management options for this environmentally sensitive area.

LANDHOLDER MAINTENANCE AGREEMENTS

During the public consultation period numerous landholders indicated that they would be willing to enter into a formal maintenance agreement with council to de-nut coconut palms

adjacent to their property. It is proposed that council trial this arrangement with willing landholders.

The priority location is at the southern end of Newell beach. Landowners have recently received a mail out from council with the aim of formalising coconut maintenance arrangements between the parties. Many landholders at this location currently already pay to maintain the coconut palms. Formalising this arrangement confirms the palms will be retained and registered in the database.

Map 22 – Newell Beach Area



APPENDIX 1 – REVEGETATION PLAN FOUR MILE BEACH ESPLANADE



Revegetation Plan

Four Mile Beach Esplanade

2015

Operational plan for the revegetation of site specific sections of Four Mile Beach esplanade and adjacent coastal lands.

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Introduction

This Revegetation Plan is for two parcels of land located directly to the north of Four Mile Park. This includes the foreshore land described as L14 SP160319 and the section of the esplanade directly east (refer to Figure 1). These parcels of land have been divided into two separate sections to facilitate different outcomes for each area.

Purpose

This document provides a guide for addressing the illegal clearing of native vegetation in this sensitive natural area and will be used by Council's Natural Areas staff when rehabilitating this area. The document complies with Council's responsibility to manage the site according to the Queensland Coastal Plan which aims to protect native vegetation on coastal land. It also integrates community consultation results on the desired environmental outcome. The document complies with the Port Douglas Waterfront Master Plan, adopted by Council in November 2009, by supporting the following key outcome: "to preserve and enhance areas of existing environmental significance including revegetation to protect dunal systems".

This document does not address the management of coconut palms within the entire Douglas Shire Council area. Associated issues such as public safety, removal, de-nutting and preserving coconut palms are addressed within the Coconut Management Council Coconut Management Plan.

Site location

The site is divided into two sections each with its own revegetation plan. The basis for dividing the two sections along its common boundary is to allow for differences in the landscape's character between the unstable dunal area (Section 1) and the land described as L14 SP160319 (Section 2). Both sections are directly adjacent to remnant vegetation type 7.2.8, which is listed as an environmental significant area.

Douglas Shire Council is the trustee of the esplanade and adjacent coastal lands and is responsible for management of these natural areas.



Figure 1 Site location

Management considerations

Illegal clearing

Following the construction of the adjacent property development, this site has been the target of ongoing illegal clearing of native foreshore vegetation for several years. Mature native trees and seedlings have been destroyed on numerous occasions, presumably to enhance ocean views for the adjacent blocks of land for sale and for the recently constructed residential properties.



Figure 2 Stumps of mature native trees illegally cleared.



Figure 3 A beach almond tree (*Terminalia catappa*) reshooting after being illegally removed.

Foreshore vegetation

The vegetation is described as *Melaleuca leucadendra* open forest to woodland on sands of beach origin, RE type 7.2.8 on the Queensland Government regional ecosystems database. It is listed as essential habitat, remnant vegetation containing of concern regional ecosystems, and the biodiversity status is listed as “Endangered”. Section 1 meets the criteria of a sensitive area of unstable dune as there is currently very little native vegetation existing under retained mature coconut palms.



Figure 4 Section 1.

Coconut palms

The site previously contained large numbers of mature coconut palms that had been planted. To enable the area to be rehabilitated with native foreshore species, 49 of these coconut palms were removed in 2012, leaving only those coconuts along the beach edge so as to maintain a visual continuity with the whole of Four Mile Beach. The removal of coconuts is critical essential as coconuts displace native vegetation by

smothering seedlings and plants with falling fronds and nuts, and out-compete native plants for sunlight, nutrients and root space.



Figure 5 Coconut palm fronds smother and out-compete native species.

Council recognises that coconut palms contribute to the tropical atmosphere of Port Douglas and are a feature of the majority of Four Mile Beach, therefore any coconut palms that over-hanged or aligned the foreshore were retained to ensure that the area retained its tropical ambiance (refer to Figure 6).



Figure 6 Front lines of coconut palms retained.

Weeds

The site has minor occurrences of invasive pest plant species that require ongoing treatment to avoid the weeds spreading into adjacent remnant vegetation.



Figure 7 Mother-in-laws tongue (*Sansevieria trasciata*) spreading through the understorey.



Figure 8 Rattlepod (*Crotalaria pallida*) occurs abundantly in the area if it is not managed.

Desired outcomes and actions

Section 1

To rehabilitate the dunal area providing connectivity and establishment of foreshore vegetation by:

- Educating nearby residents regarding Council's requirement to act in accordance with the Coastal Protection and Management Act.
- Addressing the issue of illegal clearing for sea views by compromising with filtered views or sea views through gaps in the vegetation.
- Allowing trees to establish in widely spaced groves or with some gaps to allow views and breezes to flow through the vegetation.
- Providing small habitat linkages to improve species survival and encourage the re-colonisation of the dunal system.
- Formalising the access tracks.

- Encouraging community participation and stewardship in the rehabilitation project.

Section 2

To revegetate the area with appropriate suitable native species (as shown in Appendix 1) by:

- Preserving and enhancing the existing remnant vegetation.
- Controlling weeds.
- Encouraging participation from residents to take ownership by maintaining the landscaped area directly in front of their homes.
- Retaining the existing landscaped area between the houses and the fig trees (as shown in Figure 9).



Figure 9 The landscaped area between the fig tree and the houses will be retained.

Appendix 1 List of suitable plant species

| Botanical Name | Common Name |
|------------------------------------|----------------------------------|
| <i>Acacia crassicaarpa</i> | Northern golden wattle |
| <i>Acacia mangium</i> | Broadleaf salwood |
| <i>Acacia oraria</i> | Coastal wattle |
| <i>Acmena hemilampra</i> | Blush satinash |
| <i>Aglaiia elaeagnoidea</i> | Coastal boodyarra |
| <i>Alphitonia petriei</i> | Sarsaparilla |
| <i>Alyxia spicata</i> | Chain fruit |
| <i>Atractocarpus fitzalanii</i> | Brown gardenia |
| <i>Barringtonia calyptrata</i> | Mango pine |
| <i>Beilschmiedia obtusifolia</i> | Blush walnut |
| <i>Blepharocarya involucrigera</i> | Rose butternut |
| <i>Brachychiton acerifolius</i> | Illawarra flame tree |
| <i>Breynia cernua</i> | Fart bush |
| <i>Calophyllum inophyllum</i> | Beach calophyllum |
| <i>Calophyllum sil</i> | Blush touriga |
| <i>Canarium vitiense</i> | Canarium |
| <i>Carallia brachiata</i> | Corky bark, Fresh water mangrove |
| <i>Casuarina equisetifolia</i> | Beach casuarina |
| <i>Cerbera manghas</i> | Dog bane |
| <i>Chionanthus ramiflora</i> | Native olive |
| <i>Clerodendrum longiflorum</i> | Long flowered clerodendrum |
| <i>Colubrina asiatica</i> | Beach berry bush |
| <i>Cordia subcordata</i> | Sea trumpet |
| <i>Crinum pedunculatum</i> | Beach lily, Swamp lily |
| <i>Cupaniopsis anacardioides</i> | Beach Tamarind |
| <i>Deplanchea tetraphylla</i> | Golden bouquet tree |
| <i>Dillenia alata</i> | Red beech |
| <i>Diospyros compacta</i> | Australian ebony |
| <i>Dodonea viscosa</i> | Hop bush |
| <i>Elaeodendron melanocarpum</i> | False olive |
| <i>Eucalyptus plattphylla</i> | Ghost gum |
| <i>Euroschinus falcata</i> | Pink poplar |
| <i>Ficus benjamina</i> | Weeping fig |
| <i>Ficus drupacea</i> | Drupe fig |
| <i>Ficus microcarpa</i> | Small fruited fig |
| <i>Ficus opposita</i> | Sandpaper fig |
| <i>Ficus racemosa</i> | Cluster fig |
| <i>Ganophyllum falcatum</i> | Daintree hickory |
| <i>Glochidion harveyanum</i> | Harvey's buttonwood |
| <i>Glochidion philippicum</i> | Daintree cheese tree |
| <i>Gmelina dalrympleana</i> | White beech |
| <i>Gomphandra australiana</i> | Buff beech |
| <i>Guioa acutifolia</i> | Glossy tamarind |
| <i>Haemodorum coccineum</i> | Blood root |

| Botanical Name | Common Name |
|---------------------------------|----------------------------|
| <i>Hibiscus tiliaceus</i> | Coast cottonwood |
| <i>Intsia bijuga</i> | Kwila |
| <i>Jagera pseudorhus</i> | Foambark |
| <i>Livistona muelleri</i> | Northern cabbage tree palm |
| <i>Lophostemon suaveolens</i> | Swamp mahogany, swamp box |
| <i>Macaranga tanarius</i> | Kamala, Blush macaranga |
| <i>Mallotus philippensis</i> | Red kamala |
| <i>Maytenus fasciculiflora</i> | |
| <i>Melaleuca leucadendra</i> | Weeping paperbark |
| <i>Melaleuca viridiflora</i> | Broad leaved paperbark |
| <i>Melia azederach</i> | White cedar |
| <i>Micromelum minutum</i> | Lime berry |
| <i>Miliusa brahei</i> | Raspberry jelly plant |
| <i>Millettia pinnata</i> | Pongamia tree |
| <i>Mimusops elengi</i> | Red coondoo |
| <i>Mischocarpus exangulatus</i> | Red bell mischocarp |
| <i>Morinda citrifolia</i> | Rotten cheese fruit |
| <i>Pandanus tectorius</i> | Beach pandan |
| <i>Pittosporum ferrugineum</i> | Rusty pittosporum |
| <i>Planchonia careya</i> | Cocky apple |
| <i>Pleiogynium timorense</i> | Burdekin plum |
| <i>Polyscias elegans</i> | Celerywood |
| <i>Pouteria chartacea</i> | Thin leaved coondoo |
| <i>Pouteria obovata</i> | Yellow boxwood |
| <i>Premna serratifolia</i> | Coastal premna |
| <i>Ptychosperma elegans</i> | Solitaire palm |
| <i>Rhus taitensis</i> | Sumac |
| <i>Scaevola taccada</i> | Beach lettuce |
| <i>Schefflera actinophylla</i> | Umbrella tree |
| <i>Scolopia braunii</i> | Brown birch |
| <i>Sterculia quadrifida</i> | Peanut tree |
| <i>Syzygium angophoroides</i> | Yarrabah satinash |
| <i>Tarenna dallachiana</i> | Tree ixora |
| <i>Terminalia arenicola</i> | Brown damson |
| <i>Terminalia catappa</i> | Indian almond |
| <i>Terminalia microcarpa</i> | Damson plum |
| <i>Terminalia muelleri</i> | Mueller's damson |
| <i>Thespesia populneoides</i> | Tulip tree |
| <i>Timonius timon</i> | False fig |
| | |

APPENDIX 2 – COMMUNITY ENGAGEMENT PLAN – FOUR MILE BEACH REVEGETATION

Project Title:

Four Mile Beach Revegetation Project

Project Manager:

Peter Logan

.....
Signature

.....
Date

Branch Manager Approval:

Michael Kriedemann

.....
Signature

.....
Date

General Manager Approval:

Nick Wellwood

.....
Signature

.....
Date

Councilor's Workshop (if required):

Reference:

#

Define the project

The revegetation plan consisted of removing approximately 50 coconut palms and replanting the site with 3,000 native plants. Removal of the palms was critical to the success of the revegetation plan as the density of the palms was such that any understory species could not benefit from solar nutrition or rainfall. In addition, large palm fronds or coconuts falling on the new plants could damage them and significantly hamper their chance of survival and growth. In revegetation exercises of this nature the initial planting numbers appear large but this is to allow for some natural attrition.

One of the considerations given to the timing of the revegetation works was the impact on the tourism sector and environmental conditions. The coconut removal and replanting was therefore scheduled to be undertaken during the wet season between late January and late March, as this is a low tourism period and the wet conditions would enhance planting growth. Based on the revegetation project undertaken at Rocky Point, it would be expected that within twelve months the new plantings will have a significant positive visual impact.

Engagement goals

Douglas Shire Council must provide sufficient information to all stakeholders regarding the proposed project so that the scope of the proposal is fully comprehended and the advantages and disadvantages understood.

Key project messages

- To provide timely, consistent and clear information to all stakeholders regarding the project.
- To report outcomes of consultation and stakeholder engagement.
- The key message and benefits of the project are –

Area of interest

The subject site (Lot 14 on SP160319) is a **Reserve for Beach Protection and Coastal Management** purposes managed by Council on the State's behalf as well as incorporating the Esplanade on the southern end of Four Mile Beach. It is also adjacent to Four Mile Park and the Esplanade on the southern end of Four Mile Beach, Port Douglas. The Reserve is positioned between the foreshore and private residences that form part of The Beach Front (The Sands), Port Douglas.

Identifying the stakeholders

Internal stakeholders

- Paul Hoye –General Manager Operations

- Michael Kriedemann – Manager Infrastructure
- Peter Logan – Coordinator Open Spaces
- Sean Cooper– Team Leader Open Spaces Port Douglas
- Greg McLean – Media and Communications Officer
- DSC Frontline Services

Mayor and Councillors

- Mayor Julia Leu
- Cr Abigail Noli
- Cr David Carey
- Cr Terry Melchert
- Cr Bruce Clarke

External stakeholders

- Residents of Lot 14
- Broader Community
- Douglas Shire Sustainability Group
- Port Douglas Tourism
- Film Industry Association
- Department Of Environment Protection & Heritage
- Terrain NRM
- TO's

Level of engagement

This campaign will **inform/educate**.

Inform / educate – to provide balanced and objective information on Council policies, plans, strategies and decisions. The outcome is an informed community which is therefore better able to contribute to Council participation processes. The success of this project will also require behavioral change by surrounding residents.

Techniques – launch consultation April 2016

| Technique | Level of engagement | Description | Key Messages | Stakeholder Audience | Timeframe | Responsibility |
|---|---------------------|---|---------------------------------------|--------------------------------|---|-----------------------|
| Letter drop | Inform / educate | Letter & fact sheet to key user groups. | Brief outline of project. | As per stakeholder list | Commencement of public consultation phase | DSC –project manager |
| Advertising – council column in Mossman Gazette | inform/educate | Outline project. | Brief outline of project – fact sheet | General Pt Douglas community | Commencement of consultation phase | DSC - project manager |
| DSC Website | Inform / educate | Webpage outlining project – fact sheet | Brief outline of project – fact sheet | All users | Consultation phase | DSC - project manager |
| Media Release / Council Column | Inform / educate | Announcement | Brief outline of project – fact sheet | General Port Douglas community | After consultation phase | DSC - project manager |

Available resources

CEO Unit - Letter & DSC website.
CEO Unit - Advertising - Council Column in Mossman gazette.
Press release for key milestones (completed project)

Budget allocation

No separate budget allocation
Advertising: Mossman Gazette. An advertisement to run in both publications at start of PC process. Approximately \$600.
Letter drop: Incorporated into branch overheads

Monitoring, feedback & evaluation

Feedback from residents and ratepayers throughout the consultation phase will be monitored, collated and reported.

APPENDIX 3 – REVEGETATION PLAN SHERATON MIRAGE

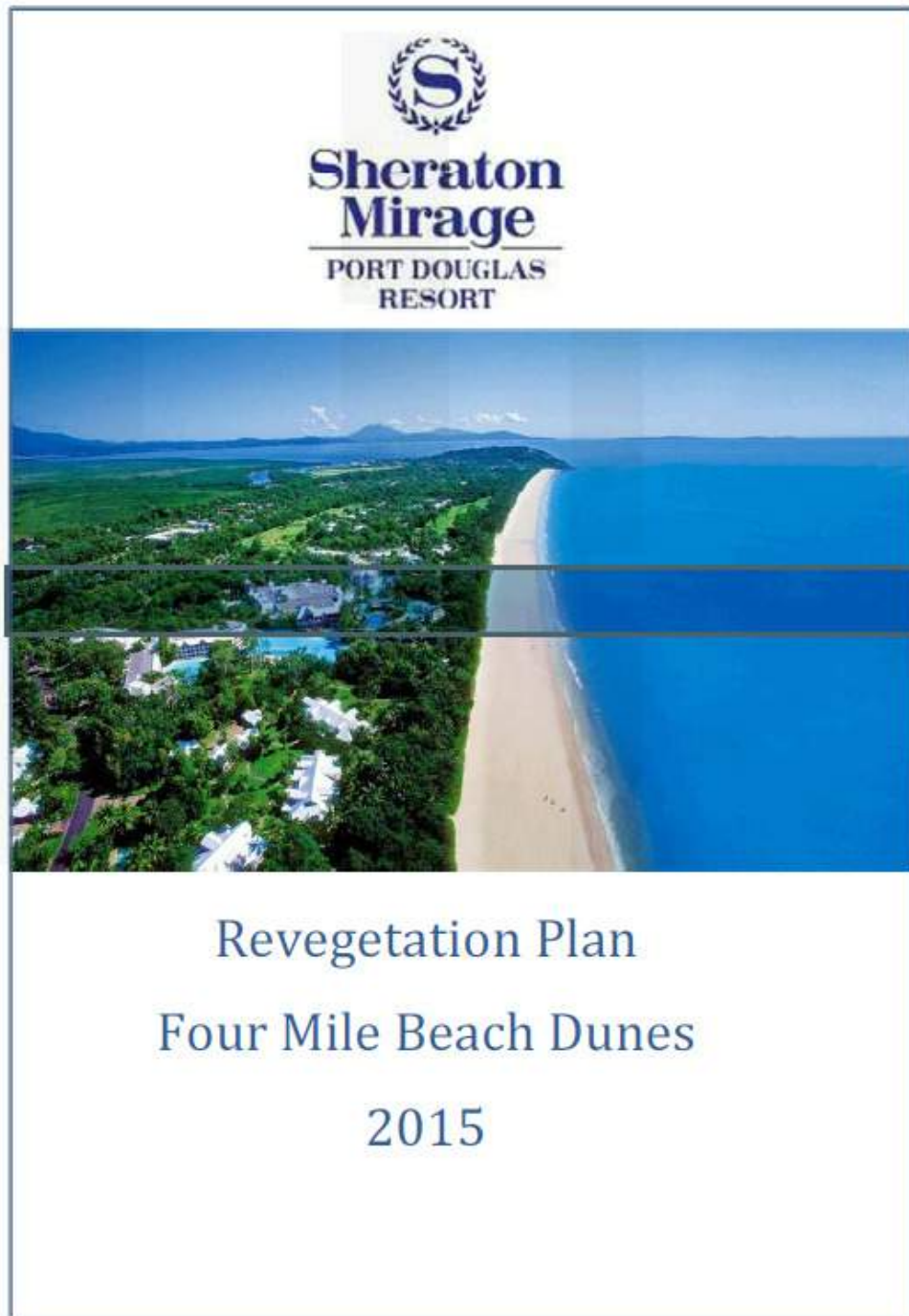




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Sheraton



Introduction

This Revegetation Plan is for the land located directly adjacent to the Sheraton Mirage Port Douglas Resort. This includes the foreshore land directly east of the Resort as indicated in Figure 1. This area has been divided into three separate sections.



Figure 1: The three sections of foreshore and dunal area to be covered in the scope of works

Purpose

This document addresses the legal clearing of invasive pest plant species that require ongoing treatment to avoid the weeds spreading into adjacent remnant vegetation. The revegetation of the area will be in line with the Douglas Shire Council recommendations and provision of appropriate plant stock.

Site Location

As stated and indicated above, the site has been divided into 3 sections which are all covered by this revegetation plan so as to keep the natural continuous appearance of the foreshore.

The site is owned by Fullmarr Hotels NQ Pty Ltd trading as Sheraton Mirage Port Douglas Resort and referred to in the Deed of Grant of Land First Schedule as Lot 133 on Plan SR819 in the County of Solander Parish of Salisbury and Town of Port Douglas.

Sheraton



Sheraton Mirage Port Douglas Resort - Dune Area

Sheraton Mirage Port Douglas Resort plans to restore the dune area adjoining Four Mile Beach to enhance the beach as well as the Resort grounds. The works will involve clearing out all unsightly, fallen leaves, branches and fronds.

The area involved is along the dune extending from the Wedding Chapel pathway through to the beach access pathway at the northern end of the Resort side of the northern Mirage Villa boundary.

The works will require some removal of branches and unwanted vegetation as identified by the Douglas Shire Council during discussions on 13 August 2015 and as outlined in Simon Clarke's letter of 21 August 2015. The area will be completed in the 3 suggested stages and Council is to provide restocking vegetation with plants suitable to regenerate the dune in line with the Coastal Management Plan.

It is proposed that the Sheraton Mirage Port Douglas Resort grounds team will commence the required works once agreement is reached. Work will be carried out in stages and distinct sections so as to limit the impact of the program and provide a gradual but timely improvement to the foreshore and dune area.

Scope of Works

Stage 1. - Clean-up of waste vegetation.

From discussions with local council representatives it has been recommended that the work to clean out the abundance of waste vegetation from in the dune area is to be completed in three sections.



Figure 2 – Southern beach access

Sheraton



Fig 3 Central beach access



Figure 4 Northern beach access

Completing the works in three sections will limit the overall impact on the area and allow the Council to advise on the revegetation program and work to be completed before moving to the next section.

Clearing the existing access pathways to the beach is also part of these works.

Items of vegetation to be cleaned out include the removal of all fallen leaves, fronds, dead vegetation, coconuts fruit and dangerous and/or unstable branches together with unwanted vegetation as identified on site with Council.

Sheraton



Figure 5. Fallen fronds on dunes behind Four Mile Beach

Stage 2 – Revegetation

Once the clearing of each section has been completed, the Resort will request involvement of the Douglas Shire Council to inspect the site and determine the appropriate ground cover required for the long term sustainability of the dune area whilst gaining the best possibly aesthetics from the Resort side.

Stage 3 - Coconut Management

The Resort will consider a Coconut Management Plan. This plan will come into effect once the revegetated areas are completed, in line with Council's research and guidelines.

Ongoing Management

The Resort grounds team will remove fallen fronds and invasive pest plant species on a regular basis. The general clearing of rubbish from the area will be undertaken on as needed by Resort staff. This continual maintenance of the dunal area will allow the indigenous plantings to take hold and flourish.

Desired Outcome

To maintain the tropical ambiance of Port Douglas in general and the Resort and Four Mile Beach in particular, it is intended to retain all healthy coconut trees. The native vegetation will survive with the careful management of this sensitive area.

The future removal of damaged and/or dangerous coconut trees will only be done following consultation with Douglas Shire Council.

Sheraton



It is the intention of the Resort owners and management team to return the dune area of Four Mile Beach to a safe, picturesque, environmentally friendly and natural state.

Sheraton

6



Appendix 1.

Copy for information only as noted by Cairns Regional Council Revegetation Plan, Four Mile Beach Esplanade 2013.

List of suitable plant species for Four Mile Beach dune area

| Botanical Name | Common Name |
|------------------------------------|----------------------------------|
| <i>Acacia crassicaarpa</i> | Northern golden wattle |
| <i>Acacia mangium</i> | Broadleaf salwood |
| <i>Acacia oraria</i> | Coastal wattle |
| <i>Acmena hemilampra</i> | Blush satinash |
| <i>Aglaia elaeagnoidea</i> | Costal boodyarra |
| <i>Alphitonia petrei</i> | Sarsaparilla |
| <i>Alyxia spicata</i> | Chain fruit |
| <i>Atractocarpus fitzalanii</i> | Brown gardenia |
| <i>Barringtonia calyptate</i> | Mango pine |
| <i>Beilschmiedia obtusifolia</i> | Blush walnut |
| <i>Blepharocarya involucrigera</i> | Rose butternut |
| <i>Brachychiton acerifolius</i> | Illawarra flame tree |
| <i>Breynia cernua</i> | Fart bush |
| <i>Calophyllum inophyllum</i> | Beach calophyllum |
| <i>Calophyllum sil</i> | Blush touriga |
| <i>Canarium vitiense</i> | Canarium |
| <i>Carallia brachiata</i> | Corky bark, Fresh water mangrove |
| <i>Casuarina equisetifolia</i> | Beach casuarina |
| <i>Cerbera manghas</i> | Dog bane |
| <i>Chionanthus ramiflora</i> | Native olive |
| <i>Clerodendrum longiflorum</i> | Long flowered clerodendrum |
| <i>Colubrina asiatica</i> | Beach berry bush |
| <i>Cordia subcordata</i> | Sea trumpet |
| <i>Crinum pedunculatum</i> | Beach lily, Swamp lily |
| <i>Cupaniopsis anacardioides</i> | Beach Tamarind |
| <i>Deplanchea tetraphylla</i> | Golden bouquet tree |
| <i>Dillenia alata</i> | Red beech |
| <i>Diospyros compacta</i> | Australian ebony |
| <i>Dodonea viscosa</i> | Hop bush |
| <i>Elaeodendron melanocarpum</i> | False olive |
| <i>Eucalyptus platyphylla</i> | Ghost gum |
| <i>Euroschinus falcate</i> | Pink poplar |
| <i>Ficus benjamina</i> | Weeping fig |
| <i>Ficus drupacea</i> | Drupe fig |
| <i>Ficus macrocarpa</i> | Small fruited fig |
| <i>Ficus opposita</i> | Sandpaper fig |
| <i>Ficus racemosa</i> | Cluster fig |
| <i>Ganophyllum falcatum</i> | Daintree hickory |
| <i>Glochidion harveyanum</i> | Harvey's buttonwood |
| <i>Glochidion philippicum</i> | Daintree cheese tree |
| <i>Gmelina dalrympleana</i> | White beech |

Sheraton



| Botanical Name | Common Name |
|---------------------------------|----------------------------|
| <i>Gomphandra Australiana</i> | Buff beech |
| <i>Guioa acutifolia</i> | Glossy tamarind |
| <i>Haemodorum coccineum</i> | Blood root |
| <i>Hibiscus tiliaceus</i> | Coast cottonwood |
| <i>Intsia bijuga</i> | Kwila |
| <i>Jagera pseudorhus</i> | Foambark |
| <i>Livistona muelleri</i> | Northern cabbage tree palm |
| <i>Lophostemon suaveolens</i> | Swamp mahogany, swamp box |
| <i>Macaranga tanarius</i> | Kamala, Blush macaranga |
| <i>Mallotus philippensis</i> | Red kamala |
| <i>Maytenus fasciculiflora</i> | Orange bark |
| <i>Melaleuca leucadendra</i> | Weeping paperbark |
| <i>Melaleuca viridiflora</i> | Broad leaved paperbark |
| <i>Melia azederach</i> | White cedar |
| <i>Micromelum minutum</i> | Lime berry |
| <i>Milusa brahei</i> | Raspberry jelly plant |
| <i>Millettia pinnata</i> | Pongamia tree |
| <i>Mimusops elengi</i> | Red coondoo |
| <i>Mischocarpus exangulatus</i> | Red bell mischocarp |
| <i>Morinda citrifolia</i> | Rotten cheese fruit |
| <i>Pandanus tectorius</i> | Beach pandan |
| <i>Pittosporum ferrugineum</i> | Rusty pittosporum |
| <i>Planchonia careya</i> | Cocky apple |
| <i>Pleogyneum timorensis</i> | Burdekin plum |
| <i>Polyscias elegans</i> | Celerywood |
| <i>Pouteria chartacea</i> | Thin leaved coondoo |
| <i>Pouteria obovata</i> | Yellow boxwood |
| <i>Premna serratifolia</i> | Coastal premna |
| <i>Ptychosperma elegans</i> | Solitaire palm |
| <i>Phus taitensis</i> | Sumac |
| <i>Scaevola taccada</i> | Beach lettuce |
| <i>Schefflera actinophylla</i> | Umbrella tree |
| <i>Scolopia braunii</i> | Brown birch |
| <i>Sterculia quadrifida</i> | Peanut tree |
| <i>Syzygium angophoroides</i> | Yarrabah satinash |
| <i>Torenia dallachiana</i> | Tree ixora |
| <i>Terminalia arenicola</i> | Brown damson |
| <i>Terminalia catappa</i> | Indian almond |
| <i>Terminalia macrocarpa</i> | Damson plum |
| <i>Terminalia muelleri</i> | Mueller's damson |
| <i>Thespesia populneoides</i> | Tulip tree |
| <i>Timonium timon</i> | False fig |

Sheraton