

## Regional Ecosystem Technical Descriptions

Technical descriptions provide a detailed description of the full range in structure and floristic composition of regional ecosystems (e.g. 8.2.7) and their component vegetation communities (e.g. 8.2.7a, 8.2.7b).

The descriptions are compiled using site survey data from the Queensland Herbarium's CORVEG database. Distribution maps, representative images (if available) and the pre-clearing and remnant area (hectares) of each vegetation community derived from the regional ecosystem mapping (spatial) data are included. The technical descriptions should be used in conjunction with the fields from the regional ecosystem description database (REDD) for a full description of the regional ecosystem. Quantitative site data from relatively undisturbed sites are extracted from CORVEG and summarized to provide information specific to each vegetation community.

Technical descriptions include the attributes: tree canopy height and cover and native plant species composition of the predominant layer, which are used to assess the remnant status of vegetation under the *Vegetation Management Act 1999*. However, as technical descriptions reflect the full range in structure and floristic composition across the climatic, natural disturbance and geographic range of the regional ecosystem, local reference sites should be used where possible (Neldner *et al.* 2012 section 3.3.1).

The technical descriptions are subject to review and are updated as additional data becomes available.

When conducting a BioCondition assessment, these technical descriptions should be used in conjunction with [BioCondition benchmarks](#) for the specific regional ecosystem, or component vegetation community.

### Field definitions

Description	Description of the species, structural formation and habitat of the vegetation community (this is not the Regulation description)
Area of pre-clearing regional ecosystem	The area of the regional ecosystem vegetation community before clearing in hectares
Area of remnant RE and percentage remaining	The area of the remnant regional ecosystem vegetation community in hectares and as a percentage of pre-clearing extent
Species recorded	Total number; number of woody species; number in the ground layer (some species can be both woody and occur in the ground layer); average number of species per site (using only sites where a completed species list was recorded); standard deviation; number of sites used to calculate the average species number.
Basal area	Site average, range and standard deviation ( $m^2/hectare$ )
Structural Formation	Percentage of sites by structural formation. For example: Woodland: 39%; open-forest: 39%; open-woodland: 22%, 23 site(s)
Representative CORVEG sites	Site (id) numbers used in the description
For each stratum present: <ul style="list-style-type: none"> <li>• Emergent (E)</li> <li>• Canopy (T1), Sub-canopy (T2) and Low tree layers (T3)</li> <li>• Shrub (S1) and Sub-shrub layers (S2)</li> <li>• Ground (G)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Height</i> - average canopy height in metres, range in metres and number of sites values are based on.</li> <li>• <i>Cover</i> - Average percentage canopy cover of the layer, range and number of sites values are based on.</li> <li>• <i>Average stem density</i> (stems per hectare), range and number of sites values are based on.</li> </ul>
Dominant species (relative cover, frequency):	Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum.  For example: <i>Abutilon albescens</i> (78, 46%), means this species occurs in 46% of all sites and when it occurs comprises 78% of total cover (of the stratum)
Frequent species (cover, frequency):	Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency.  For example: <i>Abutilon albescens</i> (10, 46%), means this species occurs in 46% of all sites and when it occurs has a mean cover of 10% Ground layer species are listed as either graminoid or forbs. Naturalised species have an asterisk (*) after the scientific name. <i>indet.</i> after listed name = indeterminate species or genus

## Department of Science, Information Technology, Innovation and the Arts

### Conditions of use

Technical descriptions have been developed from information published by the State of Queensland (acting through the Department) and remain the property of the State of Queensland. Technical descriptions are not to be included on internet sites other than the Queensland Government website.

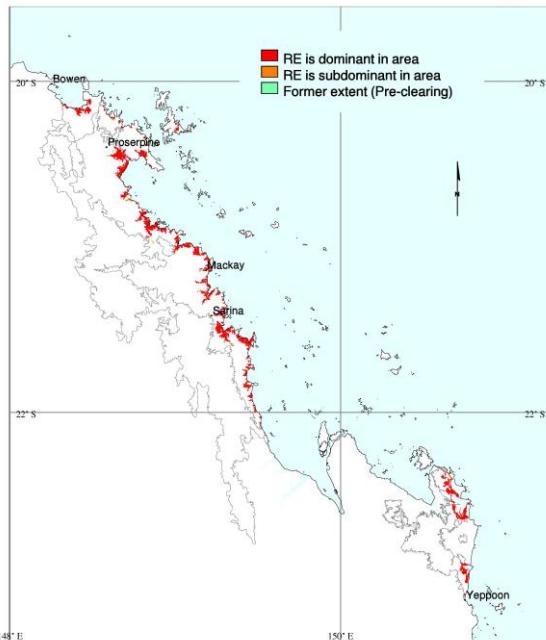
Users should reference information contained in the technical descriptions as: Kemp, J. (ed.) (year\*) Technical Descriptions of Regional Ecosystems of the Central Queensland Coast, (month, year\*) (Queensland Herbarium, Department of Science, Information Technology, Innovation and the Arts: Brisbane). \* Date shown in footnote of individual descriptions.

While every effort has been made to ensure the information presented is as reliable as possible, the State of Queensland accepts no liability and gives no assurance in respect of its accuracy and shall not be liable for any loss or damage arising from its use.

Technical descriptions are based on a combination of quantitative and qualitative information and should be used as a guide only. Technical descriptions are not to be used as a substitute for reference sites. Descriptions are subject to review and are updated as additional data becomes available.

### For more information, contact:

Jeanette Kemp, [Queensland Herbarium](#).

**Mangrove closed-forest of marine clay plains and estuaries**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 41,066 40,346 98%

Species recorded: Total: 20; woody: 15; ground: 6; Avg. spp./site: 5.6; std dev.: 4.1, 5 site(s)

Basal area: Avg./site: 17.8 m<sup>2</sup>/ha, range: 1.0 - 33 m<sup>2</sup>/ha, std. deviation: 13 m<sup>2</sup>/ha, 5 site(s)

Structural formation: Low open-forest: 50%; open-heath: 17%; open-forest: 17%; low closed-forest: 17%, 6 site(s)

Representative sites: 17515, 19513, 19514, 19918, 34866, 44859.

**Stratum: E**

Height avg. = 5.5m, range 5-6m, 2 sites

Crown cover avg. = 10.5%, range 3.0-18.0%, 2 sites

Stem density/ha avg. = 100, 1 site

*Frequent species (cover, frequency): Avicennia marina (3, 17%), Avicennia marina subsp. australasica (18, 17%)*

**Stratum: T1**

Height avg. = 6.3m, range 4-12m, 5 sites

Crown cover avg. = 87.0%, range 70.0-100.0%, 4 sites

Stem density/ha avg. = 10523, range 2240-19000, 4 sites

*Dominant species (relative cover, frequency): Ceriops tagal (100, 33%), Rhizophora stylosa (72, 33%), Bruguiera gymnorhiza (29, 33%), Avicennia marina (6, 33%)*

*Frequent species (cover, frequency): Avicennia marina (2, 33%), Bruguiera gymnorhiza (14, 33%), Ceriops tagal (92, 33%), Rhizophora stylosa (56, 33%), Carallia brachiata (17%), Excoecaria agallocha (10, 17%), Heritiera littoralis (20, 17%), Lumnitzera racemosa (15, 17%), Xylocarpus moluccensis (15, 17%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.1.1

### Stratum: T2

Height avg. = 7.0m, 1 site

Crown cover avg. = 20.0%, 1 site

Stem density/ha avg. = 780, 1 site

Dominant species (relative cover, frequency): *Ceriops tagal* (50, 33%)

Frequent species (cover, frequency): *Ceriops tagal* (20, 33%), *Acanthus ilicifolius* (17%), *Bruguiera gymnorhiza* (17%), *Excoecaria agallocha* (3, 17%), *Heritiera littoralis* (6, 17%), *Lumnitzera racemosa* (5, 17%), *Xylocarpus moluccensis* (5, 17%)

### Stratum: S1

Height avg. = 1.6m, range 0.5-2m, 6 sites

Crown cover avg. = 23.0%, range 5.0-65.0%, 5 sites

Stem density/ha avg. = 3213, range 960-5467, 2 sites

Dominant species (relative cover, frequency): *Ceriops tagal* (92, 50%), *Rhizophora stylosa* (58, 33%), *Aegiceras corniculatum* (1, 33%)

Frequent species (cover, frequency): *Ceriops tagal* (21, 50%), *Aegiceras corniculatum* (33%), *Rhizophora stylosa* (23, 33%), *Acanthus ilicifolius* (1, 17%), *Avicennia marina* (17%), *Bruguiera gymnorhiza* (17%), *Carallia brachiata* (2, 17%), *Clerodendrum inerme* (1, 17%), *Derris trifoliata* (1, 17%), *Heritiera littoralis* (1, 17%), *Lumnitzera racemosa* (5, 17%), *Osbornia octodonta* (20, 17%), *Xylocarpus moluccensis* (2, 17%)

### Stratum: S2

Height avg. = 0.6m, 1 site

Crown cover avg. = 5.0%, 1 site

Frequent species (cover, frequency): *Aegiceras corniculatum* (3, 17%), *Lumnitzera racemosa* (17%), *Osbornia octodonta* (17%), *Rhizophora stylosa* (2, 17%)

### Stratum: G

Height avg. = 0.7m, range 0.05-1m, 3 sites

PFC avg. = 2.5%, range 0-10%, 4 sites

Frequent species (cover, frequency): GRAMINOIDs: *Fimbristylis ferruginea* (5, 20%), *Juncus kraussii* (20, 20%)

FORBS: *Acrostichum speciosum* (9, 20%), *Derris trifoliata* (1, 20%), *Lantana camara\** (5, 20%), *Salsola kali* (20%)

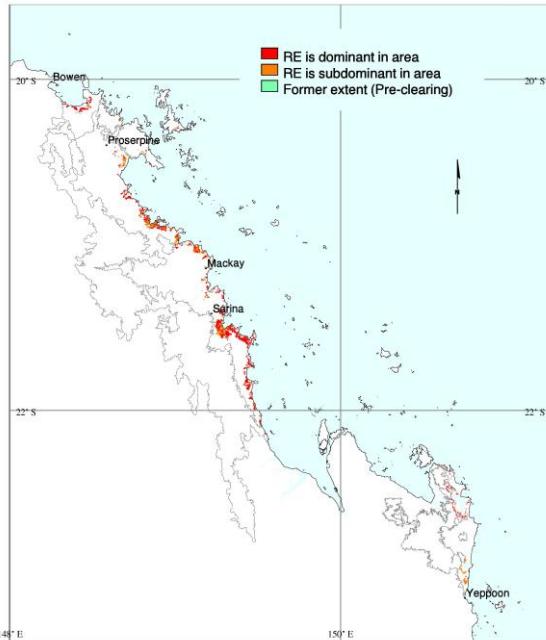
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Samphire open-forbland on saltpans and plains adjacent to mangroves**

Roger Jaensch, Wetlands International

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 11,355 10,592 93%

Species recorded: Total: 2; woody: 0; ground: 2; Avg. spp./site: 2.0; std dev.: 0.0, 2 site(s)

Basal area: 0

Structural formation: Sparse-forbland: 50%; open succulent shrubland: 50%, 2 site(s)

Representative sites: 36046, 36047.

**Stratum: G**

Height avg. = 0.2m, 1 site

PFC avg. = 2.5%, range 0-5%, 2 sites

*Dominant species (relative cover, frequency): Halosarcia indet. (98, 50%), Sarcocornia quinqueflora subsp. quinqueflora (2, 50%)*

*Frequent species (cover, frequency): GRAMINOIDs:*

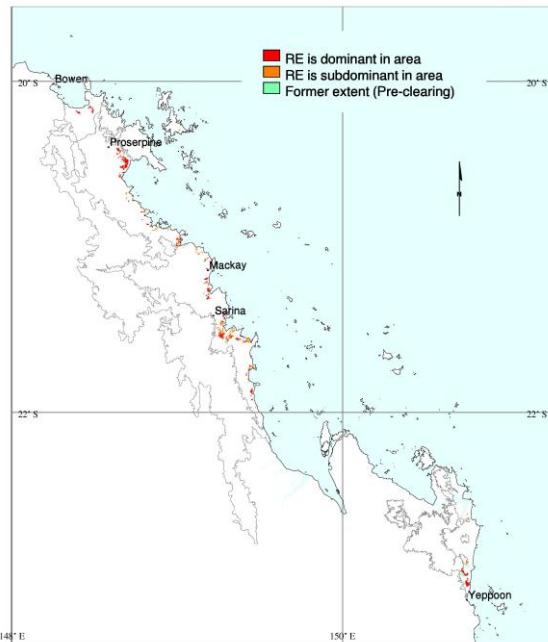
*FORBS: Halosarcia indet. (5, 50%), Sarcocornia quinqueflora subsp. quinqueflora (50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

**Sporobolus virginicus tussock grassland on marine sediments**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 5,046      4,201      83%

Species recorded: Total: 39; woody: 1; ground: 39; Avg. spp./site: 8.2; std dev.: 4.1, 9 site(s)

Basal area: 0

Structural formation: Closed-tussock grassland: 78%; tussock grassland: 11%; closed-sedgeland: 11%, 9 site(s)

Representative sites: 17514, 19511, 19922, 34864, 34865, 34885, 36311, 36313, 36897.

**Stratum: E**

Height avg. = 3.0m, 1 site

Crown cover avg. = 0.0%, 1 site

Stem density/ha avg. = , 1 site

Frequent species (cover, frequency): *Excoecaria agallocha* (11%)

**Stratum: G**

Height avg. = 0.3m, range 0.15-0.4m, 9 sites

PFC avg. = 92.7%, range 80-100%, 9 sites

Dominant species (relative cover, frequency): *Sporobolus virginicus* (66, 100%), *Eleocharis spiralis* (48, 22%), *Fimbristylis ferruginea* (11, 78%), *Paspalum vaginatum* (8, 22%), *Eriochloa crebra* (5, 22%)

Frequent species (cover, frequency): GRAMINOIDs: *Sporobolus virginicus* (69, 100%), *Fimbristylis ferruginea* (9, 78%), *Cyperus polystachyos* var. *polystachyos* (1, 44%), *Cyperus scariosus* (2, 44%), *Eriochloa procera* (3, 44%), *Fimbristylis polytrichoides* (1, 33%), *Cyperus difformis* (2, 22%), *Eleocharis spiralis* (33, 22%), *Eriochloa crebra* (5, 22%), *Leptochloa fusca* (22%), *Paspalum vaginatum* (8, 22%), *Schoenoplectus litoralis* (1, 22%), *Bothriochloa pertusa*\* (15, 11%), *Cynodon dactylon* (5, 11%), *Cynodon dactylon* var. *dactylon*\* (7, 11%), *Cyperus flavidus* (1, 11%), *Cyperus javanicus* (5, 11%), *Cyperus victoriensis* (2, 11%), *Digitaria didactyla*\* (11%), *Eleocharis dulcis* (11%), *Fimbristylis acicularis* (5, 11%), *Paspalum notatum*\* (11%), *Sporobolus jacquemontii*\* (4, 11%), *Themeda triandra* (11%)

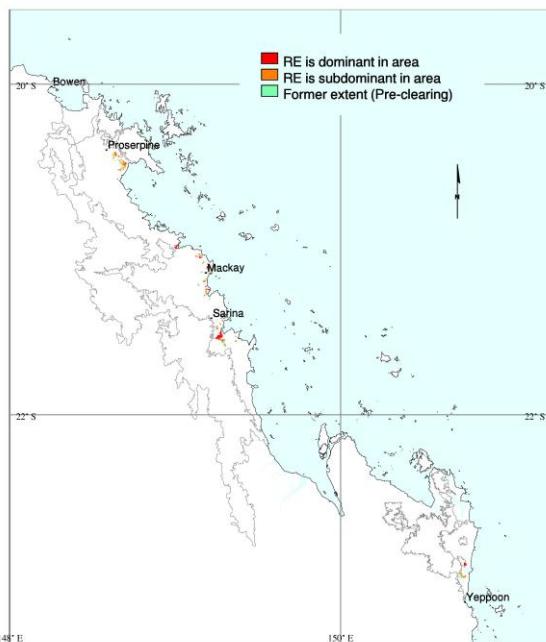
FORBS: *Gymnanthera oblonga* (33%), *Cynanchum carnosum* (1, 22%), *Camptacra gracilis* (11%), *Centaurium indet.* (11%), *Conyzia sumatrensis*\* (1, 11%), *Cyanthillium cinereum* (11%), *Epaltes australis* (11%), *Excoecaria agallocha* (11%), *Halosarcia indica* (5, 11%), *Opuntia stricta*\* (11%), *Phyla nodiflora* (11%), *Portulaca australis* (1, 11%), *Schenkia australis* (1, 11%), *Suaeda australis* (15, 11%), *Urena lobata*\* (11%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

**Schoenoplectus litoralis and/or Eleocharis dulcis sedgeland or Paspalum vaginatum tussock grassland**


Peter Olden

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 2,024 1,435 71%

Species recorded: Total: 13; woody: 0; ground: 13; Avg. spp./site: 6.3; std dev.: 1.8, 4 site(s)

Basal area: 0

Structural formation: Tussock grassland: 100%, 4 site(s)

Representative sites: 19920, 19924, 34404, 36050.

### Stratum: G

Height avg. = 0.4m, range 0.3-0.5m, 2 sites

PFC avg. = 65.5%, range 51-71%, 4 sites

*Dominant species (relative cover, frequency): Paspalum vaginatum (55, 100%), Schoenoplectus litoralis (25, 100%), Sporobolus virginicus (18, 75%), Blyxa indet. (4, 25%), Eleocharis dulcis (4, 75%)*

*Frequent species (cover, frequency): GRAMINOIDs: Paspalum vaginatum (37, 100%), Schoenoplectus litoralis (17, 100%), Cyperus scariosus (1, 75%), Eleocharis dulcis (3, 75%), Sporobolus virginicus (10, 75%), Bothriochloa bladhii (25%), Eleocharis spiralis (1, 25%), Paspalum indet. (25%), Urochloa mutica\* (25%)*

*FORBS: Blyxa indet. (3, 25%), Ludwigia octovalvis (25%), Nymphaea indet. (25%), Persicaria attenuata (25%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

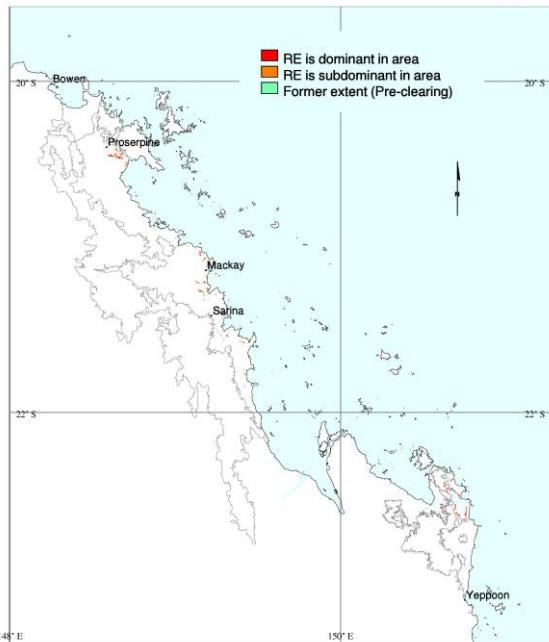
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22/11/2012

## Technical Description

## Regional ecosystem: 8.1.5

**Melaleuca spp. and/or Eucalyptus tereticornis and/or Corymbia tessellaris woodland with a ground stratum of salt tolerant grasses and sedges, usually in a narrow zone adjoining tidal ecosystems**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,471 1,215 83%

Species recorded: Total: 116; woody: 45; ground: 81; Avg. spp./site: 16.1; std dev.: 8.7, 12 site(s)

Basal area: Avg./site: 21.0 m<sup>2</sup>/ha, range: 17.0 - 27 m<sup>2</sup>/ha, std. deviation: 3 m<sup>2</sup>/ha, 6 site(s)

Structural formation: Open-forest: 31%; woodland: 25%; open-woodland: 6%; low woodland: 6%; low open-forest: 6%; unrecorded: 25%, 16 site(s)

Representative sites: 19923, 19925, 19927, 19954, 31026, 31285, 37453, 44454, 44556, 44675, 44836, 44837, 44839, 44842, 44860, 45037.

### Stratum: T1

Height avg. = 12.0m, range 6-14m, 9 sites

Crown cover avg. = 60.6%, range 0.0-88.0%, 7 sites

Stem density/ha avg. = 887, range 340-1540, 6 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (87, 50%), *Melaleuca quinquenervia* (80, 44%)

Frequent species (cover, frequency): *Melaleuca leucadendra* (56, 50%), *Melaleuca quinquenervia* (24, 44%), *Dendrophthoe glabrescens* (19%), *Corymbia tessellaris* (2, 13%), *Livistona decora* (12, 13%), *Acacia leptocarpa* (17, 6%), *Eucalyptus tereticornis* (22, 6%), *Excoecaria agallocha* (6%), *Lumnitzera racemosa* (8, 6%), *Melaleuca viridiflora* var. *viridiflora* (17, 6%), *Schefflera actinophylla* (40, 6%), *Schinus terebinthifolius*\* (6%)

### Stratum: T2

Height avg. = 5.5m, range 5-6m, 2 sites

Crown cover avg. = 0.0%, range 0.0-0.0%, 4 sites

Stem density/ha avg. = 50, range 40-60, 2 sites

Dominant species (relative cover, frequency): *Excoecaria agallocha* (63, 25%)

Frequent species (cover, frequency): *Excoecaria agallocha* (5, 25%), *Bruguiera gymnorhiza* (20, 13%), *Melaleuca leucadendra* (13%), *Acacia disparrima* subsp. *disparrima* (20, 6%), *Acacia julifera* subsp. *curvinervia* (5, 6%), *Aegiceras corniculatum* (20, 6%), *Allocasuarina littoralis* (5, 6%), *Cryptocarya triplinervis* (5, 6%), *Cupaniopsis anacardioides* (20, 6%), *Eucalyptus exserta* (5, 6%), *Heritiera littoralis* (6%), *Livistona decora* (6%), *Melaleuca quinquenervia* (40, 6%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.1.5

### Stratum: S1

Height avg. = 2.7m, range 2-4m, 5 sites

Crown cover avg. = 7.6%, range 0.0-35.0%, 5 sites

Stem density/ha avg. = 305, range 20-960, 4 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (63, 25%)

Frequent species (cover, frequency): *Phragmites australis* (21, 13%), *Gahnia sieberiana* (40, 6%), *Melaleuca leucadendra* (9, 25%), *Acanthus ilicifolius* (20, 13%), *Alphitonia excelsa* (13%), *Cupaniopsis anacardiooides* (3, 13%), *Excoecaria agallocha* (2, 13%), *Myoporum acuminatum* (13%), *Banksia integrifolia* subsp. *compar* (5, 6%), *Banksia robur* (5, 6%), *Cyclophyllum coprosmoides* (5, 6%), *Cynanchum carnosum* (5, 6%), *Glochidion lobocarpum* (6%), *Glochidion sumatranum* (6%), *Grevillea banksii* (6%), *Gymnanthera oblonga* (6%), *Homalanthus nutans* (6%), *Jagera pseudorhus* var. *pseudorhus* (5, 6%), *Lantana camara*\* (6%), *Lithomyrtus obtusa* (5, 6%), *Ludwigia* indet. (6%), *Lumnitzera racemosa* (5, 6%), *Lygodium microphyllum* (6%), *Melaleuca quinquenervia* (5, 6%), *Melaleuca viridiiflora* var. *viridiiflora* (8, 6%), *Melastoma malabathricum* subsp. *malabathricum* (5, 6%), *Passiflora foetida*\* (1, 6%), *Petalostigma pubescens* (1, 6%), *Schinus terebinthifolius*\* (6%), *Timonius timon* var. *timon* (6%)

### Stratum: S2

Height avg. = 1.0m, 1 site

Frequent species (cover, frequency): *Melaleuca viridiiflora* var. *viridiiflora* (5, 6%), *Sida hackettiana* (30, 6%)

### Stratum: G

Height avg. = 1.1m, range 0.8-2m, 4 sites

PFC avg. = 74.3%, range 59-86%, 6 sites

Dominant species (relative cover, frequency): *Sporobolus virginicus* (41, 50%), *Baumea juncea* (32, 33%), *Acrostichum speciosum* (27, 50%), *Blechnum indicum* (25, 25%), *Baumea rubiginosa* (23, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Sporobolus virginicus* (33, 50%), *Fimbristylis ferruginea* (6, 42%), *Baumea juncea* (27, 33%), *Eriochloa procera* (6, 33%), *Baumea rubiginosa* (16, 25%), *Cyperus polystachyos* var. *polystachyos* (1, 25%), *Cyperus scariosus* (2, 25%), *Eleocharis dulcis* (11, 25%), *Imperata cylindrica* (14, 25%), *Leptochloa fusca* subsp. *fusca* (25%), *Paspalum vaginatum* (11, 25%), *Cyperus haspan* subsp. *juncoides* (2, 17%), *Cyperus javanicus* (7, 17%), *Echinochloa colona*\* (2, 17%), *Phragmites australis* (2, 17%), *Baumea articulata* (4, 8%), *Echinochloa crus-galli*\* (1, 8%), *Eleocharis spiralis* (9, 8%), *Ischaemum australe* (8%), *Juncus continuus* (5, 8%), *Juncus kraussii* (30, 8%), *Ottochloa nodosa* (20, 8%), *Paspalidium distans* (8%), *Paspalum* indet. (8%), *Paspalum scrobiculatum* (8%), Poaceae indet. (8%), *Schoenoplectus littoralis* (1, 8%), *Sporobolus* indet. (15, 8%)

FORBS: *Acrostichum speciosum* (19, 50%), *Aster subulatus*\* (5, 42%), *Sesuvium portulacastrum* (1, 33%), *Blechnum indicum* (15, 25%), *Cynanchum carnosum* (8, 25%), *Gymnanthera oblonga* (25%), *Passiflora foetida*\* (1, 25%), *Phyla canescens*\* (1, 25%), *Solanum nodiflorum*\* (25%), *Alternanthera denticulata* (17%), *Desmodium incanum*\* (17%), *Epaltes australis* (1, 17%), *Marsilea* indet. (17%), *Melaleuca leucadendra* (1, 17%), *Passiflora suberosa*\* (3, 17%), *Phyllanthus debilis*\* (1, 17%), *Sesbania cannabina* (17%), *Sonchus oleraceus*\* (17%), *Aeschynomene indica* (8%), *Amaranthaceae* indet. (1, 8%), *Angiosperm* indet. (8%), *Asteraceae* indet. (8%), *Bacopa monnieri* (5, 8%), *Centella asiatica* (8%), *Ceratopteris thalictroides* (15, 8%), *Crinum flaccidum* (8%), *Cyanthillium cinereum* (8%), *Dianella caerulea* (8%), *Eclipta prostrata* (1, 8%), *Emilia sonchifolia*\* (8%), *Enchytraea tomentosa* (8%), *Excoecaria agallocha* (8%), *Jasminum didymum* (8%), *Lemna aequinoctialis* (8%), *Lomandra longifolia* (5, 8%), *Ludwigia* indet. (1, 8%), *Mimosa pudica*\* (8%), *Nymphaea* indet. (8%), *Planchonia careya* (8%), *Schenkia australis* (8%), *Trophis scandens* subsp. *scandens* (8%), *Vigna vexillata* var. *angustifolia* (8%), *Vigna vexillata* var. *youngiana* (8%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

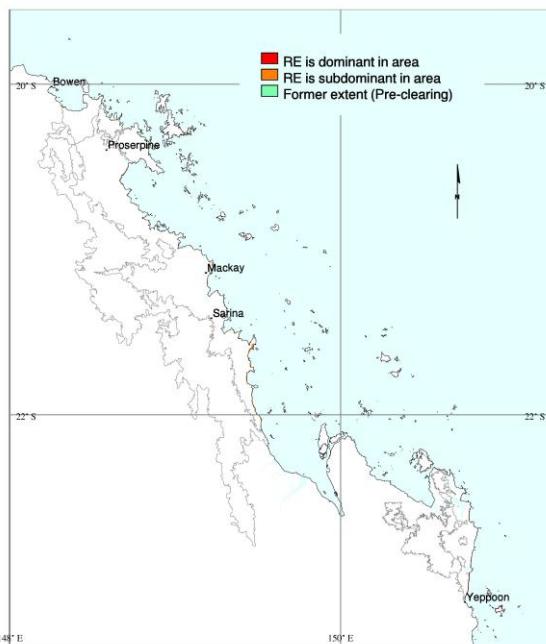
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.1

### Casuarina equisetifolia woodland and/or sparse-herbland to open-scrub on foredunes and beaches



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,182 1,044 88%

Species recorded: Total: 74; woody: 17; ground: 59; Avg. spp./site: 17.5; std dev.: 3.9, 6 site(s)

Basal area: Avg./site: 6.8 m<sup>2</sup>/ha, range: 6.0 - 8 m<sup>2</sup>/ha, std. deviation: 1 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Low woodland: 20%; open-woodland: 10%; low open-woodland: 10%; low open-forest: 10%; unrecorded: 50%, 10 site(s)

Representative sites: 31124, 31290, 37024, 40686, 44193, 44194, 44447, 44779, 44985, 44995.

#### Stratum: E

Frequent species (cover, frequency): *Casuarina equisetifolia* subsp. *incana* (10%), *Pandanus tectorius* (10%)

#### Stratum: T1

Height avg. = 7.1m, range 4-12m, 7 sites

Crown cover avg. = 37.8%, range 5.0-70.0%, 4 sites

Stem density/ha avg. = 436, range 160-880, 3 sites

Dominant species (relative cover, frequency): *Casuarina equisetifolia* subsp. *incana* (95, 70%)

Frequent species (cover, frequency): *Casuarina equisetifolia* subsp. *incana* (35, 70%), *Thespesia populnea* (2, 20%), *Argusia argentea* (5, 10%), *Casuarina equisetifolia* (5, 10%), *Sophora tomentosa* (10, 10%)

#### Stratum: T2

Height avg. = 5.0m, 1 site

Frequent species (cover, frequency): *Casuarina equisetifolia* subsp. *incana* (40, 10%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.1

### Stratum: S1

Height avg. = 0.8m, range 0.4-1.5m, 3 sites

Crown cover avg. = 8.0%, range 0.0-28.0%, 4 sites

Stem density/ha avg. = 297, range 60-533, 2 sites

Frequent species (cover, frequency): *Casuarina equisetifolia* subsp. *incana* (2, 20%), *Alphitonia excelsa* (10%), *Cassytha filiformis* (2, 10%), *Colubrina asiatica* (5, 10%), *Diospyros* indet. (1, 10%), *Indigofera pratensis* (20, 10%), *Jasminum didymum* (10%), *Lantana camara*\* (10%), *Petalostigma pubescens* (20, 10%), *Phebalium woombye* (20, 10%), *Pouteria sericea* (10%), *Sarcostemma viminale* subsp. *australe* (10%)

### Stratum: G

Height avg. = 0.4m, range 0.3-0.6m, 4 sites

PFC avg. = 52.0%, range 25-92%, 3 sites

Dominant species (relative cover, frequency): *Lepturus repens* (27, 50%), *Thuarea involuta* (19, 33%), *Zoysia macrantha* (17, 50%), *Paspalidium* indet. (17, 33%), *Cenchrus echinatus*\* (13, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Spinifex sericeus* (11, 100%), *Eragrostis interrupta* (3, 67%), *Lepturus repens* (18, 50%), *Zoysia macrantha* (14, 50%), *Cenchrus echinatus*\* (13, 33%), *Imperata cylindrica* (4, 33%), *Paspalidium* indet. (14, 33%), *Thuarea involuta* (9, 33%), *Cyperus pedunculatus* (17%), *Elionurus citreus* (5, 17%), *Eriachne triodioides* (17%), *Pennisetum ciliare*\* (17%), *Sporobolus virginicus* (12, 17%), *Themeda triandra* (17%), *Urochloa* indet. (1, 17%)

FORBS: *Emilia sonchifolia*\* (2, 67%), *Enchyalaena tomentosa* (5, 67%), *Passiflora suberosa*\* (2, 67%), *Lithomyrtus obtusa* (3, 50%), *Carpobrotus glaucescens* (2, 33%), *Cassytha filiformis* (33%), *Hybanthus enneaspermus* (33%), *Ipomoea pes-caprae* (3, 33%), *Ipomoea pes-caprae* subsp. *brasiliensis* (3, 33%), *Jasminum didymum* subsp. *didymum* (3, 33%), *Opuntia stricta*\* (33%), *Passiflora foetida*\* (33%), *Sonchus oleraceus*\* (3, 33%), *Achyranthes aspera* (5, 17%), *Boerhavia pubescens* (17%), *Canavalia rosea* (8, 17%), *Chamaesyce* indet. (17%), *Chamaesyce vachellii* (5, 17%), *Clematicissus opaca* (17%), *Crotalaria brevis* (17%), *Crotalaria montana* (5, 17%), *Cucumis* indet. (5, 17%), *Dianella caerulea* (17%), *Dianella crinoides* (17%), *Euphorbia tannensis* subsp. *tannensis* (17%), *Glycine* indet. (2, 17%), *Grevillea banksii* (5, 17%), *Hibbertia scandens* (17%), *Ipomoea cairica*\* (13, 17%), *Livistona decora* (17%), *Melodinus australis* (17%), *Mukia maderaspatana* (17%), *Pimelea linifolia* (5, 17%), *Podolepis longipedata* (18, 17%), *Poranthera microphylla* (17%), *Pouteria sericea* (18, 17%), *Stephania japonica* (17%), *Tribulus* indet. (17%), *Triumfetta repens* (2, 17%), *Vitex rotundifolia* (2, 17%), *Vitex trifolia* (18, 17%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

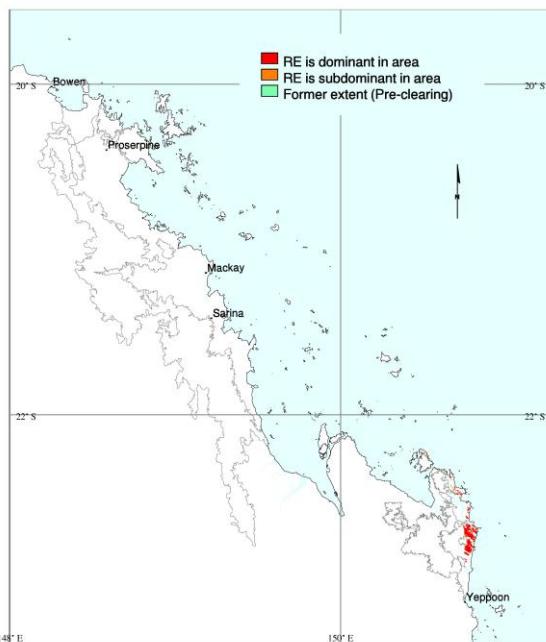
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22/11/2012

## Technical Description

## Regional ecosystem: 8.2.3a

### **Allocasuarina littoralis and/or Leptospermum polygalifolium and/or Leptospermum neglectum shrubland on parabolic and whaleback dunes**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 5,498 5,483 100%

Species recorded: Total: 59; woody: 45; ground: 32; Avg. spp./site: 20.1; std dev.: 3.5, 8 site(s)

Basal area: Avg./site: 2.8 m<sup>2</sup>/ha, range: 0.5 - 6 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Tall shrubland: 10%; shrubland: 10%; open-scrub: 10%; open-heath: 10%; low open-woodland: 10%; dwarf shrubland: 10%; dwarf open-heath: 10%; closed-heath: 10%; unrecorded: 20%, 10 site(s)

Representative sites: 19940, 19964, 19965, 44381, 44638, 44795, 44796, 44828, 44876, 44879.

#### Stratum: E

Height avg. = 3.3m, range 3-3.5m, 3 sites

Crown cover avg. = 14.0%, range 0.0-28.0%, 2 sites

Stem density/ha avg. = 1160, 1 site

Dominant species (relative cover, frequency): *Banksia integrifolia* subsp. *compar* (70, 40%)

Frequent species (cover, frequency): *Banksia integrifolia* subsp. *compar* (8, 40%), *Eucalyptus latisinensis* (3, 20%), *Allocasuarina littoralis* (20, 10%), *Cassytha* indet. (10%), *Corymbia clarksoniana* (10%), *Corymbia intermedia* (2, 10%), *Dendrophthoe glabrescens* (10%), *Eucalyptus exserta* (10%), *Leptospermum neglectum* (8, 10%), *Leptospermum polygalifolium* (8, 10%), *Lophostemon suaveolens* (10%), *Melaleuca viridiflora* var. *viridiflora* (5, 10%), *Phebalium woombye* (10%), *Platysace linearifolia* (10%), *Ricinocarpus pinifolius* (3, 10%), *Xanthorrhoea latifolia* subsp. *latifolia* (1, 10%)

#### Stratum: T1

Height avg. = 2.0m, 1 site

Frequent species (cover, frequency): *Allocasuarina littoralis* (2, 10%), *Corymbia intermedia* (6, 10%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: T2**

Frequent species (cover, frequency): *Allocasuarina torulosa* (5, 10%), *Leptospermum polygalifolium* (5, 10%)

**Stratum: S1**

Height avg. = 1.6m, range 0.7-2.2m, 8 sites

Crown cover avg. = 66.0%, range 29.0-95.0%, 3 sites

Stem density/ha avg. = 12750, range 3600-21900, 2 sites

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (33, 90%), *Leptospermum polygalifolium* (21, 50%), *Leptospermum neglectum* (14, 40%), *Ricinocarpos pinifolius* (12, 60%), *Homoranthus virgatus* (10, 50%)

Frequent species (cover, frequency): *Caustis recurvata* (40, 10%), *Allocasuarina littoralis* (19, 90%), *Brachyloma daphnoides* (5, 60%), *Ricinocarpos pinifolius* (7, 60%), *Homoranthus virgatus* (6, 50%), *Leptospermum polygalifolium* (13, 50%), *Lithomyrtus obtusa* (4, 50%), *Leptospermum neglectum* (6, 40%), *Phyllota phyllicoides* (5, 40%), *Platysace linearifolia* (2, 40%), *Leucopogon leptospermoides* (2, 30%), *Phebalium woombie* (4, 30%), *Baeckea frutescens* (14, 20%), *Cassytha filiformis* (1, 20%), *Hibbertia linearis* (1, 20%), *Ochrosperma lineare* (1, 20%), *Xanthorrhoea latifolia* subsp. *latifolia* (8, 20%), *Zieria laxiflora* (2, 20%), *Acacia julifera* subsp. *curvinervia* (2, 10%), *Acacia quadrilateralis* (10%), *Alphitonia excelsa* (10%), *Banksia integrifolia* subsp. *compar* (16, 10%), *Bossiaea brownii* (7, 10%), *Cassytha indet.* (10%), *Corymbia intermedia* (3, 10%), *Eucalyptus latisinensis* (5, 10%), *Exocarpos latifolius* (7, 10%), *Leptospermum indet.* (10, 10%), *Melaleuca dealbata* (2, 10%), *Persoonia virgata* (10%), *Pimelea linifolia* (7, 10%)

**Stratum: S2**

Height avg. = 1.1m, range 0.9-1.3m, 2 sites

Crown cover avg. = 50.0%, range 23.0-77.0%, 2 sites

Stem density/ha avg. = 15700, 1 site

Dominant species (relative cover, frequency): *Xanthorrhoea latifolia* subsp. *latifolia* (23, 30%), *Platysace linearifolia* (22, 30%), *Phyllota phyllicoides* (18, 40%), *Leucopogon leptospermoides* (15, 50%), *Homoranthus virgatus* (15, 40%)

Frequent species (cover, frequency): *Caustis recurvata* (6, 20%), *Leucopogon leptospermoides* (10, 50%), *Lithomyrtus obtusa* (6, 50%), *Brachyloma daphnoides* (8, 40%), *Homoranthus virgatus* (10, 40%), *Phyllota phyllicoides* (14, 40%), *Ricinocarpos pinifolius* (6, 40%), *Phebalium woombie* (4, 30%), *Platysace linearifolia* (10, 30%), *Xanthorrhoea latifolia* subsp. *latifolia* (13, 30%), *Allocasuarina littoralis* (6, 20%), *Leptospermum neglectum* (3, 20%), *Ochrosperma lineare* (1, 20%), *Persoonia virgata* (1, 20%), *Pseudanthus orientalis* (1, 20%), *Acacia julifera* subsp. *curvinervia* (10%), *Acrotriche aggregata* (9, 10%), *Aotus lanigera* (2, 10%), *Baeckea frutescens* (9, 10%), *Banksia integrifolia* subsp. *compar* (9, 10%), *Cassytha filiformis* (10%), *Cassytha glabella* (10%), *Dampiera ferruginea* (10%), *Hibbertia indet.* (10%), *Hibbertia stricta* (9, 10%), *Pimelea linifolia* (9, 10%), *Pomax umbellata* (2, 10%), *Zieria laxiflora* (2, 10%)

**Stratum: G**

Height avg. = 0.6m, range 0.2-1m, 3 sites

PFC avg. = 7.7%, range 0-13%, 3 sites

Dominant species (relative cover, frequency): *Schoenus ornithopodioides* (25, 63%), *Caustis recurvata* (24, 88%), *Lithomyrtus obtusa* (23, 38%), *Eriachne insularis* (19, 50%), *Jacksonia stackhousei* (18, 38%)

Frequent species (cover, frequency): GRAMINOIDs: *Caustis recurvata* (13, 88%), *Schoenus ornithopodioides* (8, 63%), *Eriachne insularis* (6, 50%), *Schoenus calostachyus* (3, 25%), *Panicum simile* (3, 13%), *Trachystylis stradbrokeensis* (13%)  
FORBS: *Ochrosperma lineare* (3, 75%), *Boronia occidentalis* (9, 50%), *Jacksonia stackhousei* (14, 38%), *Lithomyrtus obtusa* (1, 38%), *Pseudanthus orientalis* (2, 38%), *Ricinocarpos pinifolius* (1, 38%), *Baloskion pallens* (12, 25%), *Homoranthus virgatus* (7, 25%), *Leucopogon leptospermoides* (25%), *Phebalium woombie* (1, 25%), *Pimelea linifolia* (7, 25%), *Acacia julifera* subsp. *curvinervia* (13%), *Banksia integrifolia* subsp. *compar* (10, 13%), *Brachyloma daphnoides* (1, 13%), *Cassytha filiformis* (13, 13%), *Cryptostylis erecta* (3, 13%), *Dampiera ferruginea* (13%), *Genoplesium indet.* (13%), *Hibbertia linearis* (13%), *Leptospermum neglectum* (13%), *Phyllota phyllicoides* (13%), *Tephrosia filipes* (13%), *Xanthorrhoea fulva* (13, 13%), *Xyris complanata* (19, 13%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

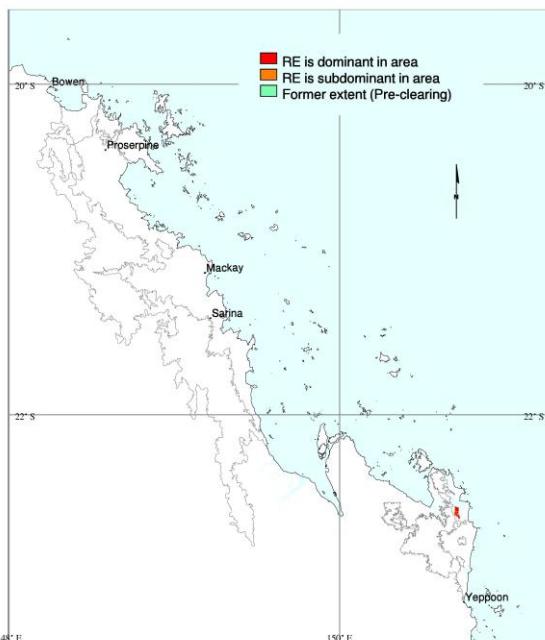
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

Regional ecosystem: 8.2.3d

### **Allocasuarina littoralis and/or Leptospermum neglectum and/or Leptospermum polygalifolium and/or Baeckea frutescens shrubland on low coastal parallel sand ridges**



Joy Brushie

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 763 763 100%

Species recorded: Total: 42; woody: 25; ground: 31; Avg. spp./site: 12.3; std dev.: 3.3, 4 site(s)

Basal area: Not available

Structural formation: Low woodland: 25%; open-heath: 13%; unrecorded: 63%, 8 site(s)

Representative sites: 44190, 44222, 44225, 44229, 44844, 44845, 44846, 44993.

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#### Stratum: E

Height avg. = 6.0m, range 3-9m, 2 sites

Frequent species (cover, frequency): *Leptospermum neglectum* (13%), *Melaleuca quinquenervia* (2, 13%)

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#### Stratum: T1

Height avg. = 6.2m, range 5-8m, 6 sites

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (77, 75%), *Leptospermum polygalifolium* (32, 25%), *Leptospermum neglectum* (16, 38%), *Acacia flavescens* (13, 25%)

Frequent species (cover, frequency): *Allocasuarina littoralis* (35, 75%), *Leptospermum neglectum* (4, 38%), *Acacia flavescens* (3, 25%), *Leptospermum polygalifolium* (13, 25%), *Banksia integrifolia* subsp. *compar* (13%), *Melaleuca quinquenervia* (13%)

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#### Stratum: T2

Dominant species (relative cover, frequency): *Ricinocarpos pinifolius* (65, 25%), *Acacia julifera* subsp. *curvinervia* (35, 25%)

Frequent species (cover, frequency): *Acacia julifera* subsp. *curvinervia* (5, 25%), *Ricinocarpos pinifolius* (13, 25%), *Monotoca scoparia* (13%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.3d

### Stratum: S1

Height avg. = 1.9m, range 1-3m, 7 sites

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (30, 50%), *Phebalium woombye* (29, 63%), *Ricinocarpus pinifolius* (26, 25%), *Leucopogon leptospermoides* (24, 63%), *Homoranthus virgatus* (14, 25%)

Frequent species (cover, frequency): *Leucopogon leptospermoides* (14, 63%), *Phebalium woombye* (17, 63%), *Brachyloma daphnoides* (4, 50%), *Lithomyrtus obtusa* (16, 50%), *Acacia julifera* subsp. *curvinervia* (4, 38%), *Cassytha* indet. (2, 25%), *Homoranthus virgatus* (11, 25%), *Leptospermum neglectum* (5, 25%), *Platysace linearifolia* (5, 25%), *Ricinocarpus pinifolius* (10, 25%), *Allocasuarina littoralis* (2, 13%), *Baeckea frutescens* (20, 13%), *Banksia robur* (10, 13%), *Hibbertia linearis* (2, 13%), *Leptospermum polygalifolium* (10, 13%), *Melaleuca quinquenervia* (13%), *Persoonia virgata* (2, 13%), *Phyllota phylicoides* (5, 13%), *Pimelea linifolia* (2, 13%), *Pityrodia salviifolia* (10, 13%), *Pseudanthus orientalis* (5, 13%)

### Stratum: S2

Height avg. = 1.0m, range 0.5-1.5m, 2 sites

Dominant species (relative cover, frequency): *Phyllota phylicoides* (12, 25%)

Frequent species (cover, frequency): *Phyllota phylicoides* (3, 25%), *Acacia julifera* subsp. *curvinervia* (2, 13%), *Allocasuarina littoralis* (2, 13%), *Hibbertia linearis* (5, 13%), *Leucopogon leptospermoides* (2, 13%), *Lithomyrtus obtusa* (5, 13%), *Sprengelia sprengelioides* (20, 13%)

### Stratum: G

Height avg. = 0.6m, range 0.3-1m, 3 sites

Dominant species (relative cover, frequency): *Xanthorrhoea fulva* (36, 25%), *Baloskion pallens* (36, 25%), *Caustis recurvata* (34, 100%), *Panicum simile* (25, 25%), *Lithomyrtus obtusa* (25, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Caustis recurvata* (23, 100%), *Eriachne* indet. (15, 75%), *Schoenus yarrabensis* (13, 50%), *Panicum simile* (5, 25%), *Trachystylis stradbrokeensis* (5, 25%)

FORBS: *Baloskion pallens* (20, 25%), *Dianella caerulea* (5, 25%), *Gonocarpus micranthus* subsp. *ramosissimus* (5, 25%), *Lithomyrtus obtusa* (5, 25%), *Monotoca scoparia* (25%), *Pimelea linifolia* (5, 25%), *Tricoryne anceps* (5, 25%), *Xanthorrhoea fulva* (20, 25%)

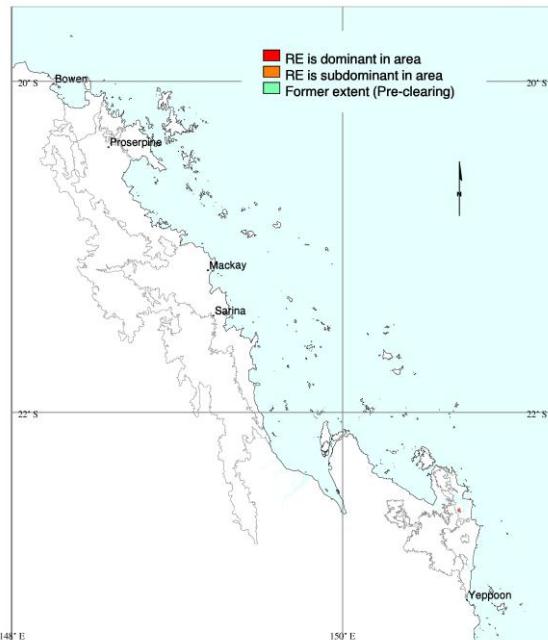
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Sedgeland on peat, of swampy sand plains and swales**

Roger Jaensch, Wetlands International

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 132 132 100%

Species recorded: Total: 25; woody: 1; ground: 25; Avg. spp./site: 7.0; std dev.: 3.4, 4 site(s)

Basal area: 0

Structural formation: Sedgeland: 50%; unrecorded: 50%, 6 site(s)

Representative sites: 19947, 27145, 27149, 44224, 44230, 44990.

**Stratum: E**

Height avg. = 7.8m, range 2.5-13m, 2 sites

*Dominant species (relative cover, frequency): Melaleuca quinquenervia (100, 33%)*

*Frequent species (cover, frequency): Melaleuca quinquenervia (4, 33%)*

**Stratum: G**

Height avg. = 1.0m, range 0.6-1.7m, 4 sites

PFC avg. = 56.7%, range 53-62%, 3 sites

*Dominant species (relative cover, frequency): Lepironia articulata (43, 75%), Baumea teretifolia (43, 75%), Empodium minus (35, 50%), Schoenus calostachyus (14, 25%), Schoenus brevifolius (14, 25%)*

*Frequent species (cover, frequency): GRAMINOIDs: Baumea teretifolia (24, 75%), Lepironia articulata (27, 75%), Baumea rubiginosa (50%), Gahnia sieberiana (1, 50%), Schoenus brevifolius (9, 25%), Schoenus calostachyus (9, 25%)*

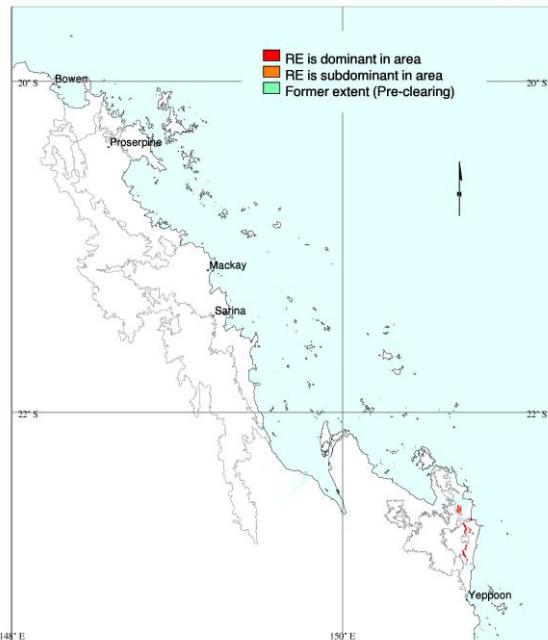
*FORBS: Melaleuca quinquenervia (75%), Drosera binata (6, 50%), Empodium minus (19, 50%), Leptospermum polygalifolium (50%), Blechnum indicum (25%), Cassytha indet. (25%), Epacris microphylla (2, 25%), Epacris microphylla var. microphylla (25%), Eucalyptus indet. (25%), Utricularia biloba (9, 25%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Closed-heath on peat, of swampy sand plains and swales**

R. Jaensch, Wetlands International

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,363 1,359 100%

Species recorded: Total: 94; woody: 50; ground: 79; Avg. spp./site: 20.0; std dev.: 6.9, 11 site(s)

Basal area: 0

Structural formation: Sedgeland: 25%; closed-sedgeland: 17%; open-heath: 8%; dwarf open-heath: 8%; unrecorded: 42%, 12 site(s)

Representative sites: 27141, 27146, 44170, 44794, 44827, 44874, 44875, 44878, 44987, 45008, 45028, 45040.

**Stratum: E**

Height avg. = 4.9m, range 1.8-9m, 5 sites

*Dominant species (relative cover, frequency): Melaleuca viridiiflora var. viridiiflora (78, 25%), Baeckea frutescens (40, 25%), Banksia robur (31, 33%), Gahnia sieberiana (19, 25%)*

*Frequent species (cover, frequency): Gahnia sieberiana (4, 25%), Baumea rubiginosa (2, 8%), Banksia robur (9, 33%), Baeckea frutescens (13, 25%), Melaleuca viridiiflora var. viridiiflora (15, 25%), Aotus lanigera (2, 8%), Cassytha filiformis (2, 8%), Dendrophthoe glabrescens (8%), Eucalyptus robusta (5, 8%), Melaleuca quinquenervia (8%)*

**Stratum: S1**

Height avg. = 1.5m, range 1.5-1.7m, 6 sites

Crown cover avg. = 90.0%, 1 site

Stem density/ha avg. = 124263, 1 site

*Dominant species (relative cover, frequency): Banksia robur (26, 42%), Baeckea frutescens (24, 33%), Leptospermum polygalifolium (23, 33%), Empodium minus (15, 25%), Gahnia sieberiana (13, 25%)*

*Frequent species (cover, frequency): Gahnia sieberiana (8, 25%), Schoenus calostachyus (7, 17%), Lepidosperma laterale (8%), Lepironia articulata (10, 8%), Banksia robur (7, 42%), Baeckea frutescens (18, 33%), Epacris microphylla (6, 33%), Leptospermum polygalifolium (21, 33%), Empodium minus (15, 25%), Baloskion pallens (23, 17%), Sprengelia sprengelioides (8, 17%), Acacia flavescens (5, 8%), Allocasuarina littoralis (20, 8%), Cassytha filiformis (13, 8%), Cassytha glabella forma glabella (8%), Drosera binata (8%), Epacris microphylla var. microphylla (16, 8%), Leptospermum indet. (1, 8%), Leucopogon leptospermoides (8%), Melastoma malabathricum subsp. malabathricum (3, 8%), Petalostigma triloculare (8%), Ricinocarpus pinifolius (8%), Styphelia indet. (4, 8%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: S2**

*Frequent species (cover, frequency): Baumea rubiginosa (8%), Schoenus calostachyus (8%), Baeckea frutescens (10, 17%), Cassytha filiformis (5, 17%), Drosera binata (10, 17%), Homoranthus virgatus (4, 17%), Mirbelia rubiifolia (17%), Phyllota phylloides (14, 17%), Pimelea linifolia (10, 17%), Acacia quadrilateralis (8%), Acacia ulicifolia (1, 8%), Aotus lanigera (2, 8%), Banksia integrifolia subsp. compar (7, 8%), Brachyloma daphnoides (2, 8%), Cassytha glabella forma glabella (13, 8%), Dapsilanthus ramosus (15, 8%), Empodium minus (13, 8%), Gonocarpus micranthus subsp. ramosissimus (13, 8%), Hibbertia linearis (8%), Hibbertia linearis var. floribunda (2, 8%), Hibbertia salicifolia (8%), Leptospermum neglectum (2, 8%), Leptospermum polygalifolium (13, 8%), Leucopogon leptospermoides (3, 8%), Lithomyrtus obtusa (15, 8%), Melastoma malabathricum subsp. malabathricum (5, 8%), Ochrosperma lineare (8%), Persoonia virgata (2, 8%), Phebalium woombie (8%), Platysace linearifolia (3, 8%), Xanthorrhoea latifolia subsp. latifolia (7, 8%), Zieria laxiflora (2, 8%)*

**Stratum: G**

Height avg. = 0.9m, range 0.6-1.3m, 7 sites

PFC avg. = 50.0%, range 38-62%, 2 sites

*Dominant species (relative cover, frequency): Blechnum indicum (34, 27%), Empodium minus (26, 55%), Xanthorrhoea fulva (17, 27%), Lepironia articulata (15, 27%), Sprengelia sprengelioides (15, 36%)*

*Frequent species (cover, frequency): GRAMINOIDs: Schoenus calostachyus (7, 64%), Baumea muelleri (3, 36%), Baumea teretifolia (5, 36%), Caustis recurvata (12, 27%), Lepironia articulata (14, 27%), Gahnia sieberiana (20, 18%), Schoenus brevifolius (5, 18%), Baumea rubiginosa (1, 9%), Ectrosia leporina (9%), Entolasia stricta (9%), Eriachne pallidescens (7, 9%), Ottochloa nodosa (9%), Panicum simile (4, 9%), Poaceae indet. (1, 9%), Schoenus ornithopodiooides (15, 9%), Schoenus paludosus (1, 9%)*

*FORBS: Empodium minus (19, 55%), Baloskion pallens (6, 45%), Drosera spatulata (6, 45%), Sprengelia sprengelioides (12, 36%), Baeckea frutescens (5, 27%), Blechnum indicum (3, 27%), Cassytha filiformis (4, 27%), Leptospermum polygalifolium (4, 27%), Mirbelia rubiifolia (2, 27%), Patersonia fragilis (27%), Sowerbaea subtilis (8, 27%), Xanthorrhoea fulva (11, 27%), Xyris complanata (2, 27%), Aotus lanigera (3, 18%), Banksia robur (1, 18%), Boronia occidentalis (1, 18%), Brachyloma daphnoides (1, 18%), Drosera binata (18%), Epacris microphylla (1, 18%), Homoranthus virgatus (18%), Jacksonia stackhousei (19, 18%), Leucopogon leptospermoides (4, 18%), Phyllota phylloides (2, 18%), Pimelea linifolia (18%), Platysace linearifolia (1, 18%), Utricularia biloba (2, 18%), Xanthorrhoea latifolia subsp. latifolia (3, 18%), Acacia ulicifolia (9%), Allocasuarina littoralis (2, 9%), Angiosperm indet. (9%), Babingtonia indet. (2, 9%), Baloskion tetraphyllum (9%), Cassytha glabella forma glabella (9%), Dapsilanthus ramosus (9%), Drosera peltata (1, 9%), Drosera pygmaea (9%), Epacris microphylla var. microphylla (1, 9%), Exocarpos cupressiformis (9%), Gonocarpus micranthus subsp. ramosissimus (9%), Hibbertia salicifolia (9%), Lithomyrtus obtusa (2, 9%), Lycopodiella cernua (9%), Lycopodiella serpentina (1, 9%), Melaleuca quinquenervia (9%), Ochrosperma lineare (1, 9%), Patersonia sericea (9%), Pomax umbellata (9%), Pseudanthus orientalis (9%), Schizaea indet. (3, 9%), Utricularia dichotoma (4, 9%), Utricularia indet. (3, 9%), Xyris indet. (9%), Xyris juncea (4, 9%), Zieria laxiflora (9%)*

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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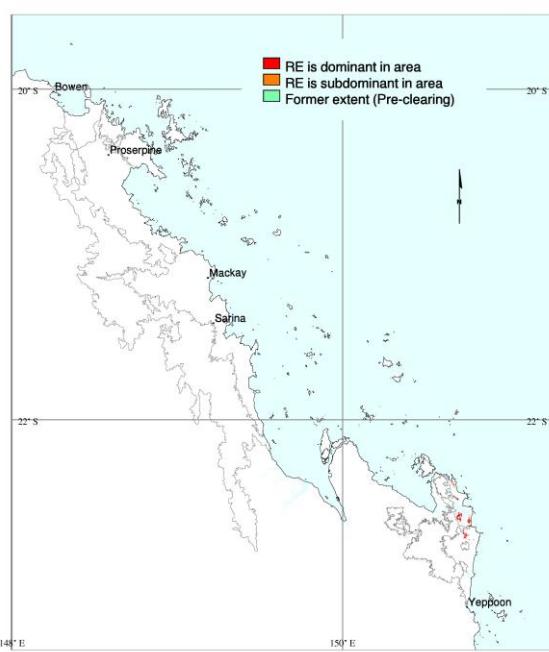
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.4c

### Melaleuca quinquenervia or M. viridiflora woodland with sedge/wet heath understorey on peat in swampy sand plains and swales



Joy Bushe

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 722 722 100%

Species recorded: Total: 124; woody: 53; ground: 102; Avg. spp./site: 19.6; std dev.: 10.4, 12 site(s)

Basal area: Avg./site: 10.0 m<sup>2</sup>/ha, range: 10.0 - 10 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Open-woodland: 12%; open-forest: 12%; low open-woodland: 6%; unrecorded: 71%, 17 site(s)

Representative sites: 40905, 44173, 44174, 44223, 44227, 44228, 44832, 44847, 44852, 44923, 44964, 44976, 44992, 45005, 45006, 45007, 45009.

#### Stratum: E

Height avg. = 5.3m, range 4-8m, 3 sites

Dominant species (relative cover, frequency): *Melaleuca quinquenervia* (65, 29%)

Frequent species (cover, frequency): *Melaleuca quinquenervia* (3, 29%), *Acacia flavescens* (2, 6%), *Banksia integrifolia* subsp. *compar* (5, 6%), *Banksia robur* (5, 6%), *Melaleuca dealbata* (5, 6%), *Pandanus tectorius* (5, 6%)

#### Stratum: T1

Height avg. = 10.4m, range 6.5-14m, 9 sites

Crown cover avg. = 5.0%, 1 site

Stem density/ha avg. = 120, 1 site

Dominant species (relative cover, frequency): *Melaleuca quinquenervia* (73, 65%)

Frequent species (cover, frequency): *Melaleuca quinquenervia* (15, 65%), *Allocasuarina littoralis* (13, 18%), *Endiandra sieberi* (6, 18%), *Lophostemon suaveolens* (2, 18%), *Banksia integrifolia* subsp. *compar* (3, 12%), *Corymbia intermedia* (8, 12%), *Eucalyptus latisinensis* (2, 12%), *Melaleuca viridiflora* var. *viridiflora* (5, 12%), *Diospyros geminata* (6%), *Leptospermum neglectum* (4, 6%), *Livistona decora* (4, 6%), *Melaleuca viridiflora* (2, 6%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.4c

### Stratum: T2

Height avg. = 6.3m, range 5-7m, 3 sites  
Crown cover avg. = 2.0%, 1 site  
Stem density/ha avg. = 35, 1 site

Frequent species (cover, frequency): *Leptospermum polygalifolium* (15, 18%), *Acacia flavescens* (10, 12%), *Allocasuarina littoralis* (4, 12%), *Banksia integrifolia* subsp. *compar* (3, 12%), *Melaleuca quinquenervia* (18, 12%), *Acacia crassa* (1, 6%), *Acacia julifera* subsp. *curvinervia* (5, 6%), *Acacia leptocarpa* (20, 6%), *Banksia robur* (40, 6%), *Cassytha filiformis* (5, 6%), *Pandanus* indet. (2, 6%), *Pandanus tectorius* (2, 6%), *Petalostigma triloculare* (6%), *Ricinocarpos pinifolius* (5, 6%)

### Stratum: S1

Height avg. = 2.6m, range 1.3-4.5m, 10 sites  
Crown cover avg. = 36.0%, 1 site  
Stem density/ha avg. = 30000, 1 site

Dominant species (relative cover, frequency): *Leucopogon leptospermoides* (33, 24%), *Banksia robur* (32, 35%), *Persoonia virgata* (29, 29%), *Baeckea frutescens* (22, 29%), *Leptospermum polygalifolium* (17, 35%)

Frequent species (cover, frequency): *Gahnia sieberiana* (19, 18%), *Baumea teretifolia* (1, 6%), *Entolasia stricta* (3, 6%), *Lepironia articulata* (18, 6%), *Schoenus brevifolius* (18, 6%), *Schoenus calostachyus* (3, 6%), *Banksia robur* (10, 35%), *Leptospermum polygalifolium* (7, 35%), *Baeckea frutescens* (9, 29%), *Persoonia virgata* (7, 29%), *Leucopogon leptospermoides* (19, 24%), *Acacia julifera* subsp. *curvinervia* (2, 18%), *Lithomyrtus obtusa* (8, 18%), *Melastoma malabathricum* subsp. *malabathricum* (1, 18%), *Allocasuarina littoralis* (3, 12%), *Aotus lanigera* (5, 12%), *Homoranthus virgatus* (10, 12%), *Melaleuca quinquenervia* (2, 12%), *Pimelea linifolia* (2, 12%), *Acacia crassa* (11, 6%), *Acacia flavescens* (5, 6%), *Alphitonia excelsa* (5, 6%), *Banksia integrifolia* subsp. *compar* (6%), *Blechnum indicum* (1, 6%), *Cassytha filiformis* (4, 6%), *Empodium minus* (12, 6%), *Eucalyptus latissinensis* (5, 6%), *Grevillea banksii* (5, 6%), *Hovea clavata* (19, 6%), *Hovea* indet. (2, 6%), *Melaleuca dealbata* (6%), *Melaleuca viridiflora* (6%), *Melaleuca viridiflora* var. *viridiflora* (10, 6%), *Monotoca* sp. (Fraser Island P.Baxter 777) (6%), *Ochrosperma lineare* (2, 6%), *Phebalium woombye* (5, 6%), *Phyllota phylicoides* (6%), *Planchonia careya* (5, 6%), *Platysace linearifolia* (6%), *Pomax umbellata* (6%), *Pseudanthus orientalis* (6%), *Ricinocarpos pinifolius* (5, 6%), *Xanthorrhoea latifolia* subsp. *latifolia* (40, 6%)

### Stratum: G

Height avg. = 0.9m, range 0.5-1.1m, 6 sites  
PFC avg. = 48.0%, 1 site

Dominant species (relative cover, frequency): *Baloskion pallens* (31, 92%), *Xanthorrhoea fulva* (26, 25%), *Schoenus brevifolius* (16, 25%), *Leptospermum polygalifolium* (14, 25%), *Schoenus calostachyus* (13, 42%)

Frequent species (cover, frequency): GRAMINOIDs: *Schoenus calostachyus* (12, 42%), *Imperata cylindrica* (10, 33%), *Caustis recurvata* (2, 25%), *Eriachne* indet. (5, 25%), *Schoenus brevifolius* (15, 25%), *Trachystylis stradbrokeensis* (5, 25%), *Baumea juncea* (37, 17%), *Eragrostis* indet. (5, 17%), *Gahnia sieberiana* (6, 17%), *Lepironia articulata* (5, 17%), *Aristida* indet. (4, 8%), *Baumea muelleri* (3, 8%), *Baumea rubiginosa* (5, 8%), *Caustis flexuosa* (8%), *Cyperus* indet. (8%), *Cyperus lucidus* (5, 8%), *Cyperus polystachyos* (5, 8%), *Cyperus tetraphyllus* (8%), *Digitaria parviflora* (4, 8%), *Ectrosia leporina* (5, 8%), *Entolasia stricta* (7, 8%), *Eriachne pallescens* (5, 8%), *Eriachne pallescens* var. *pallescens* (8%), *Ischaemum fragile* (1, 8%), *Ottochloa nodosa* (5, 8%), *Panicum simile* (2, 8%), *Paspalum scrobiculatum* (1, 8%), *Poaceae* indet. (4, 8%), *Rhynchospora brownii* (1, 8%), *Sacciolepis indica* (1, 8%), *Schoenus ornithopodoides* (2, 8%)

FORBS: *Baloskion pallens* (22, 92%), *Pimelea linifolia* (1, 42%), *Blechnum indicum* (3, 25%), *Dianella caerulea* (4, 25%), *Drosera spatulata* (3, 25%), *Empodium minus* (8, 25%), *Leptospermum polygalifolium* (9, 25%), *Leucopogon leptospermoides* (1, 25%), *Lindsaea ensifolia* (7, 25%), *Xanthorrhoea fulva* (16, 25%), *Allocasuarina littoralis* (1, 17%), *Aotus lanigera* (9, 17%), *Baeckea frutescens* (14, 17%), *Banksia robur* (3, 17%), *Cassytha pubescens* (1, 17%), *Gonocarpus micranthus* subsp. *ramosissimus* (2, 17%), *Lithomyrtus obtusa* (3, 17%), *Lygodium microphyllum* (1, 17%), *Pseudanthus orientalis* (4, 17%), *Xanthorrhoea latifolia* subsp. *latifolia* (11, 17%), *Xyris juncea* (2, 17%), *Acacia crassa* (8%), *Acacia ulicifolia* (2, 8%), *Acrotriche aggregata* (8%), *Baloskion tetraphyllum* (2, 8%), *Boronia occidentalis* (2, 8%), *Brachyloma daphnoides* (2, 8%), *Cassytha filiformis* (8%), *Dianella* indet. (8%), *Drosera binata* (5, 8%), *Drosera peltata* (8%), *Epacris microphylla* (5, 8%), *Eriocaulon australe* (8%), *Haloragis* indet. (2, 8%), *Hovea clavata* (22, 8%), *Jacksonia stackhousei* (8%), *Jagera pseudorhus* var. *pseudorhus* (8%), *Lindernia crustacea* (8%), *Lomandra* indet. (8%), *Marsdenia fraseri* (8%), *Melastoma malabathricum* subsp. *malabathricum* (5, 8%), *Myrtaceae* indet. (2, 8%), *Nymphoides* indet. (5, 8%), *Pandanus tectorius* (5, 8%), *Passiflora suberosa*\* (8%), *Persicaria attenuata* (5, 8%), *Phylidrum lanuginosum* (20, 8%), *Phyllota phylicoides* (8%), *Pomax umbellata* (8%), *Pteridium esculentum* (18, 8%), *Ricinocarpos pinifolius* (8%), *Sprengelia sprengelioides* (8%), *Tephrosia filipes* (8%), *Tricoryne anceps* (8%), *Tricoryne elatior* (8%), *Zieria laxiflora* (8%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

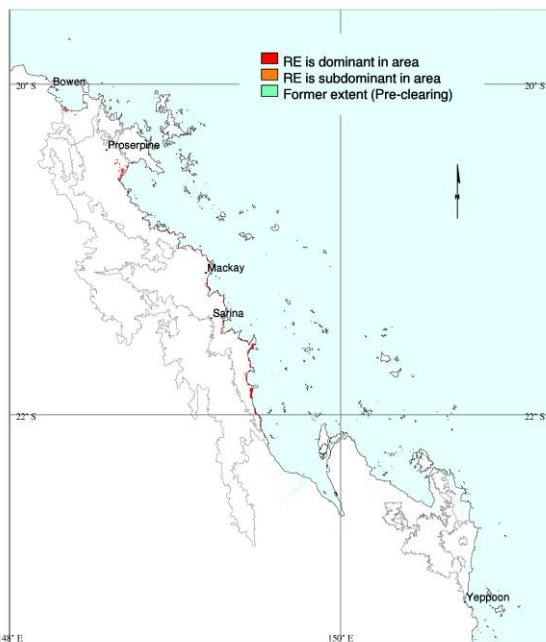
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.6a

**Corymbia tessellaris +/- Acacia leptocarpa +/- Allocasuarina littoralis +/- rainforest species open-forest on parallel dunes (subregions 2 and 6)**



Pre-clearing area (ha), remnant area (ha) and per cent remaining: 5,745 3,856 67%

Species recorded: Total: 43; woody: 25; ground: 21; Avg. spp./site: 43.0; std dev.: 0.0, 1 site(s)

Basal area: Avg./site: 18.0 m<sup>2</sup>/ha, range: 18.0 - 18 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Woodland: 100%, 1 site(s)

Representative sites: 19929.

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### Stratum: T1

Crown cover avg. = 64.0%, 1 site

Stem density/ha avg. = 320, 1 site

Dominant species (relative cover, frequency): *Corymbia tessellaris* (97, 100%), *Acacia leptocarpa* (3, 100%)

Frequent species (cover, frequency): *Acacia leptocarpa* (2, 100%), *Amyema indet.* (100%), *Corymbia tessellaris* (62, 100%)

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### Stratum: T2

Crown cover avg. = 66.0%, 1 site

Stem density/ha avg. = 840, 1 site

Dominant species (relative cover, frequency): *Acacia leptocarpa* (54, 100%), *Corymbia tessellaris* (45, 100%)

Frequent species (cover, frequency): *Acacia leptocarpa* (36, 100%), *Alphitonia excelsa* (100%), *Corymbia tessellaris* (30, 100%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.6a

### Stratum: T3

Crown cover avg. = 71.0%, 1 site

Stem density/ha avg. = 1760, 1 site

Dominant species (relative cover, frequency): *Planchonia careya* (22, 100%), *Maytenus disperma* (14, 100%), *Acacia leptocarpa* (14, 100%), *Corymbia tessellaris* (11, 100%), *Melia azedarach* (10, 100%)

Frequent species (cover, frequency): *Acacia leptocarpa* (10, 100%), *Alphitonia excelsa* (100%), *Banksia integrifolia* subsp. *compar* (5, 100%), *Corymbia tessellaris* (8, 100%), *Cupaniopsis anacardiooides* (100%), *Euroschinus falcatus* (100%), *Exocarpos latifolius* (2, 100%), *Glochidion lobocarpum* (5, 100%), *Lantana camara*\* (2, 100%), *Maytenus disperma* (10, 100%), *Melia azedarach* (7, 100%), *Planchonia careya* (16, 100%), *Pouteria sericea* (6, 100%)

### Stratum: S1

Crown cover avg. = 10.0%, 1 site

Stem density/ha avg. = 2600, 1 site

Dominant species (relative cover, frequency): *Glochidion lobocarpum* (42, 100%), *Exocarpos latifolius* (17, 100%), *Planchonia careya* (8, 100%), *Lantana camara*\* (8, 100%), *Jasminum didymum* (8, 100%)

Frequent species (cover, frequency): *Abrus precatorius* (100%), *Acacia leptocarpa* (100%), *Acronychia laevis* (100%), *Alphitonia excelsa* (100%), *Banksia integrifolia* subsp. *compar* (100%), *Cassytha filiformis* (100%), *Chionanthus ramiflora* (100%), *Clerodendrum longiflorum* var. *glabrum* (100%), *Corymbia tessellaris* (100%), *Cupaniopsis anacardiooides* (100%), *Euroschinus falcatus* (100%), *Eustrephus latifolius* (100%), *Exocarpos latifolius* (2, 100%), *Ficus opposita* (100%), *Glochidion lobocarpum* (5, 100%), *Jasminum didymum* (1, 100%), *Lantana camara*\* (1, 100%), *Macaranga tanarius* (100%), *Mallotus philippensis* (100%), *Maytenus disperma* (100%), *Melia azedarach* (100%), *Planchonia careya* (1, 100%), *Pouteria sericea* (100%), *Wikstroemia indica* (100%)

### Stratum: G

PFC avg. = 22.0%, 1 site

Dominant species (relative cover, frequency): *Lomandra longifolia* (31, 100%), *Cyperus javanicus* (17, 100%), *Cyperus eglobosus* (14, 100%), *Dianella longifolia* (12, 100%), *Eustrephus latifolius* (9, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperus eglobosus* (3, 100%), *Cyperus javanicus* (4, 100%), *Heteropogon contortus* (1, 100%), *Imperata cylindrica* (100%), *Oplismenus* indet. (100%), *Paspalidium distans* (1, 100%), Poaceae indet. (100%)

FORBS: *Abrus precatorius* (100%), *Aristolochia pubera* (100%), Asteraceae indet. (100%), *Commelina* indet. (100%), *Desmodium rhytidophyllum* (100%), *Dianella longifolia* (3, 100%), *Emilia sonchifolia*\* (100%), *Eustrephus latifolius* (2, 100%), *Glycine tomentella* (100%), *Jasminum didymum* (100%), *Lomandra longifolia* (7, 100%), *Passiflora suberosa*\* (100%), *Stephania japonica* (100%), *Triumfetta rhomboidea*\* (100%)

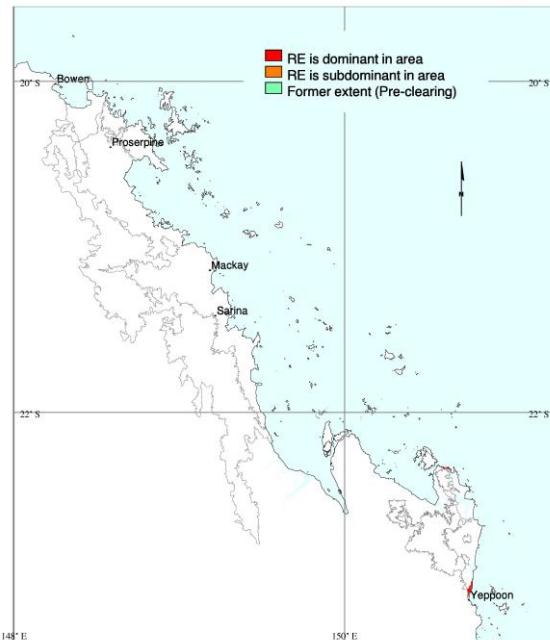
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Corymbia tessellaris open-forest on parallel dunes (subregion 5)**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,213 904 75%

Species recorded: Total: 71; woody: 52; ground: 32; Avg. spp./site: 29.7; std dev.: 4.0, 3 site(s)

Basal area: Avg./site: 20.0 m<sup>2</sup>/ha, range: 20.0 - 20 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Woodland: 25%; open-forest: 25%; unrecorded: 50%, 4 site(s)

Representative sites: 27140, 44637, 44777, 44861.

**Stratum: E**

Height avg. = 19.0m, 1 site

*Dominant species (relative cover, frequency): Corymbia tessellaris (98, 25%), Livistona decora (2, 25%)*

*Frequent species (cover, frequency): Corymbia tessellaris (5, 25%), Livistona decora (25%)*

**Stratum: T1**

Height avg. = 13.3m, range 9-18m, 4 sites

Crown cover avg. = 60.0%, 1 site

Stem density/ha avg. = 160, 1 site

*Dominant species (relative cover, frequency): Chionanthus ramiflora (96, 25%), Corymbia tessellaris (71, 75%), Banksia integrifolia subsp. compar (28, 50%), Acacia leiocalyx (19, 25%), Acacia julifera subsp. curvinervia (7, 25%)*

*Frequent species (cover, frequency): Corymbia tessellaris (30, 75%), Banksia integrifolia subsp. compar (9, 50%), Acacia julifera subsp. curvinervia (2, 25%), Acacia leiocalyx (8, 25%), Allocasuarina littoralis (25%), Chionanthus ramiflora (5, 25%), Eucalyptus tereticornis (2, 25%), Ficus rubiginosa (25%), Melaleuca dealbata (25%), Melaleuca quinquenervia (25%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.6b

### Stratum: T2

Height avg. = 10.0m, 1 site

Crown cover avg. = 53.0%, 1 site

Stem density/ha avg. = 1520, 1 site

Dominant species (relative cover, frequency): *Acacia disparrima* (82, 25%), *Jagera pseudorhus var. pseudorhus* (50, 25%), *Petalostigma pubescens* (25, 50%), *Cupaniopsis anacardiooides* (20, 75%), *Alphitonia excelsa* (17, 50%)

Frequent species (cover, frequency): *Acacia flavescens* (2, 75%), *Cupaniopsis anacardiooides* (9, 75%), *Alphitonia excelsa* (12, 50%), *Petalostigma pubescens* (10, 50%), *Acacia disparrima* (44, 25%), *Acronychia laevis* (5, 25%), *Alectryon connatus* (25%), *Breynia oblongifolia* (25%), *Chionanthus ramiflora* (25%), *Corymbia tessellaris* (25%), *Cyclophyllum coprosmoides var. coprosmoides* (2, 25%), *Exocarpos latifolius* (25%), *Ficus rubiginosa* (25%), *Ficus virens* (25%), *Glochidion sumatranum* (25%), *Jagera pseudorhus var. pseudorhus* (40, 25%), *Mallotus discolor* (25%), *Pittosporum ferrugineum* (25%), *Planchonia careya* (5, 25%)

### Stratum: T3

Height avg. = 2.5m, 1 site

Crown cover avg. = 32.0%, 1 site

Stem density/ha avg. = 4560, 1 site

Dominant species (relative cover, frequency): *Cyclophyllum coprosmoides var. coprosmoides* (46, 25%), *Cupaniopsis anacardiooides* (18, 25%), *Alphitonia excelsa* (8, 25%), *Breynia oblongifolia* (7, 25%), *Acacia disparrima* (7, 25%)

Frequent species (cover, frequency): *Acacia disparrima* (2, 25%), *Acacia flavescens* (2, 25%), *Alectryon connatus* (1, 25%), *Alphitonia excelsa* (3, 25%), *Breynia oblongifolia* (2, 25%), *Corymbia tessellaris* (25%), *Cupaniopsis anacardiooides* (6, 25%), *Cyclophyllum coprosmoides var. coprosmoides* (16, 25%), *Dodonaea viscosa* (25%), *Ficus opposita* (25%), *Jasminum simplicifolium* (25%), *Lantana camara\** (25%), *Opuntia stricta\** (25%), *Passiflora suberosa\** (25%), *Planchonia careya* (25%), *Rivina humilis\** (25%), *Solanum nodiflorum\** (1, 25%), *Solanum seaforthianum\** (25%)

### Stratum: S1

Height avg. = 5.0m, 1 site

Dominant species (relative cover, frequency): *Jasminum simplicifolium subsp. australiense* (77, 25%), *Planchonia careya* (31, 50%), *Pittosporum venulosum* (19, 25%), *Alphitonia excelsa* (19, 50%), *Acacia julifera subsp. curvinervia* (15, 25%)

Frequent species (cover, frequency): *Alphitonia excelsa* (13, 50%), *Banksia integrifolia subsp. compar* (1, 50%), *Lithomyrtus obtusa* (3, 50%), *Opuntia stricta\** (3, 50%), *Planchonia careya* (23, 50%), *Acacia julifera subsp. curvinervia* (5, 25%), *Alectryon connatus* (25%), *Alyxia ruscifolia* (25%), *Argusia argentea* (25%), *Bidens pilosa\** (25%), *Brachychiton australis* (2, 25%), *Brachychiton bidwillii* (25%), *Crotalaria pallida* (5, 25%), *Cupaniopsis anacardiooides* (5, 25%), *Diospyros geminata* (25%), *Dodonaea viscosa* (25%), *Drypetes deplanchei* (25%), *Euroschinus falcatus* (25%), *Exocarpos latifolius* (25%), *Ficus opposita* (25%), *Jasminum didymum subsp. didymum* (2, 25%), *Jasminum simplicifolium* (2, 25%), *Jasminum simplicifolium subsp. australiense* (20, 25%), *Lantana camara\** (5, 25%), *Livistona decora* (25%), *Petalostigma pubescens* (5, 25%), *Petalostigma triloculare* (5, 25%), *Pittosporum venulosum* (5, 25%), *Sophora tomentosa* (25%), *Sterculia quadrifida* (25%)

### Stratum: G

Height avg. = 1.6m, range 0.2-3m, 2 sites

PFC avg. = 0.0%, 1 site

Dominant species (relative cover, frequency): *Cyclophyllum coprosmoides var. coprosmoides* (33, 33%), *Pteridium esculentum* (25, 33%), *Xanthorrhoea latifolia subsp. latifolia* (22, 33%), *Lomandra longifolia* (22, 33%), *Jagera pseudorhus var. pseudorhus* (15, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperus ernevis* (2, 67%), *Imperata cylindrica* (4, 67%), *Axonopus compressus\** (33%), *Oplismenus aemulus* (5, 33%), *Themeda triandra* (13, 33%)

FORBS: *Passiflora suberosa\** (11, 100%), *Alphitonia excelsa* (6, 67%), *Jagera pseudorhus var. pseudorhus* (13, 67%), *Stephania japonica* (4, 67%), *Acacia disparrima* (33%), *Alectryon connatus* (33%), *Cupaniopsis anacardiooides* (33%), *Cyclophyllum coprosmoides var. coprosmoides* (1, 33%), *Dianella caerulea* (33%), *Dodonaea viscosa* (33%), *Eustrephus latifolius* (3, 33%), *Ficus opposita* (33%), *Jasminum didymum subsp. didymum* (5, 33%), *Jasminum simplicifolium* (33%), *Lantana camara\** (33%), *Lomandra longifolia* (20, 33%), *Phyllanthus indet.* (5, 33%), *Pteridium esculentum* (25, 33%), *Solanum seaforthianum\** (33%), *Triumfetta rhomboidea\** (5, 33%), *Xanthorrhoea latifolia subsp. latifolia* (20, 33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

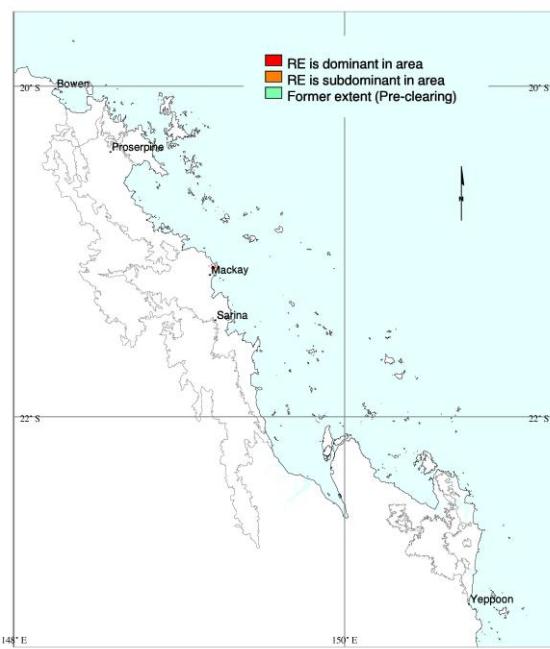
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22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7a

### Melaleuca leucadendra open-forest in near-coastal wetlands associated with parabolic dunes (subregion 2)



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 235 185 79%

Species recorded: Total: 45; woody: 15; ground: 33; Avg. spp./site: 17.0; std dev.: 11.5, 3 site(s)

Basal area: Avg./site: 38.0 m<sup>2</sup>/ha, range: 29.0 - 53 m<sup>2</sup>/ha, std. deviation: 11 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Open-forest: 100%, 3 site(s)

Representative sites: 31024, 35584, 36064.

#### Stratum: T1

Height avg. = 20.0m, range 16-24m, 2 sites

Crown cover avg. = 89.3%, range 80.0-100.0%, 3 sites

Stem density/ha avg. = 1015, range 480-1550, 2 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (98, 100%), *Parsonsia plaesiophylla* (5, 33%)

Frequent species (cover, frequency): *Melaleuca leucadendra* (88, 100%), *Nauclea orientalis* (33%), *Parsonsia plaesiophylla* (4, 33%)

#### Stratum: T2

Height avg. = 5.0m, 1 site

Crown cover avg. = 14.0%, range 10.0-18.0%, 2 sites

Stem density/ha avg. = 850, 1 site

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (89, 67%), *Melaleuca indet.* (20, 33%), *Pittosporum ferrugineum* (1, 33%), *Dendrobium canaliculatum* (1, 33%)

Frequent species (cover, frequency): *Melaleuca leucadendra* (13, 67%), *Dendrobium canaliculatum* (33%), *Melaleuca indet.* (2, 33%), *Pittosporum ferrugineum* (33%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7a

### Stratum: T3

Height avg. = 3.5m, 1 site

Crown cover avg. = 2.0%, 1 site

Stem density/ha avg. = 200, 1 site

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (100, 33%)

Frequent species (cover, frequency): *Melaleuca leucadendra* (3, 33%)

### Stratum: S1

Crown cover avg. = 4.0%, 1 site

Dominant species (relative cover, frequency): *Schinus terebinthifolius*\* (40, 33%), *Parsonsia plaesiophylla* (40, 33%), *Syzygium cumini*\* (2, 33%), *Senna pendula* var. *glabrata*\* (2, 33%), *Melaleuca leucadendra* (2, 33%)

Frequent species (cover, frequency): *Corymbia tessellaris* (33%), *Ficus rubiginosa* (33%), *Ficus virens* (33%), *Hoya indet.* (33%), *Livistona decora* (33%), *Macaranga tanarius* (33%), *Melaleuca indet.* (33%), *Melaleuca leucadendra* (33%), *Parsonsia plaesiophylla* (2, 33%), *Schinus terebinthifolius*\* (2, 33%), *Senna pendula* var. *glabrata*\* (33%), *Syzygium cumini*\* (33%)

### Stratum: G

Height avg. = 0.4m, 1 site

PFC avg. = 41.7%, range 0-64%, 3 sites

Dominant species (relative cover, frequency): *Blechnum indicum* (99, 33%), *Imperata cylindrica* (70, 33%), *Leersia hexandra* (14, 33%), *Parsonsia plaesiophylla* (9, 33%), *Gymnanthera oblonga* (8, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperaceae indet.* (33%), *Imperata cylindrica* (46, 33%), *Leersia hexandra* (9, 33%), *Paspalidium indet.* (33%), *Paspalum conjugatum*\* (33%), *Paspalum vaginatum* (33%), *Rhynchospora corymbosa* (33%), *Sorghum indet.* (33%), *Sporobolus indet.* (33%)

FORBS: *Ageratum conyzoides* subsp. *conyzoides*\* (67%), *Centella asiatica* (1, 67%), *Gymnanthera oblonga* (67%), *Passiflora foetida*\* (67%), *Alternanthera denticulata* (33%), *Angiosperm indet.* (33%), *Apocynaceae indet.* (33%), *Araceae indet.* (33%), *Asteraceae indet.* (33%), *Blechnum indicum* (60, 33%), *Cassytha filiformis* (33%), *Emilia sonchifolia*\* (33%), *Hibiscus diversifolius* (33%), *Hoya indet.* (33%), *Hygrophila angustifolia* (33%), *Ludwigia octovalvis* (33%), *Macaranga tanarius* (33%), *Mimosa pudica*\* (33%), *Parsonsia plaesiophylla* (6, 33%), *Parsonsia straminea* (33%), *Passiflora suberosa*\* (33%), *Phyla canescens*\* (33%), *Stachytarpheta jamaicensis*\* (1, 33%), *Urena lobata*\* (33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

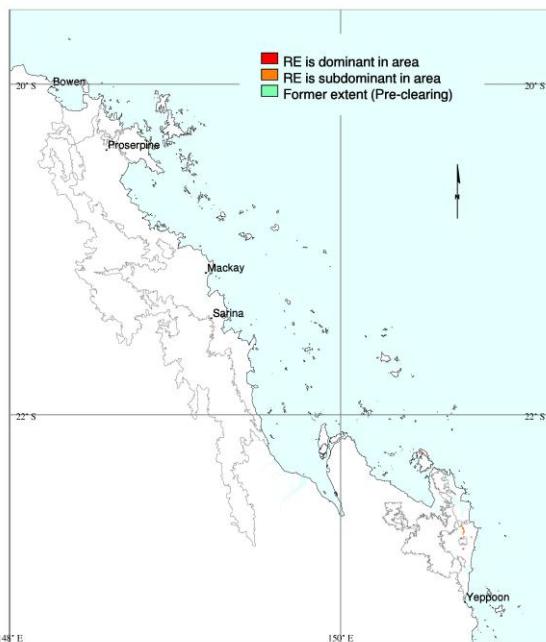
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

Regional ecosystem: 8.2.7b

### **Eucalyptus robusta, Melaleuca quinquenervia open-forest in low-lying areas associated with parabolic dunes (subregions 4 and 5)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 211 211 100%

Species recorded: Total: 55; woody: 28; ground: 39; Avg. spp./site: 18.4; std dev.: 4.5, 5 site(s)

Basal area: Avg./site: 19.5 m<sup>2</sup>/ha, range: 18.0 - 21 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Woodland: 29%; open-forest: 14%; low open-woodland: 14%; unrecorded: 43%, 7 site(s)

Representative sites: 19932, 19944, 44171, 44606, 44797, 44831, 45029.

#### Stratum: T1

Height avg. = 11.6m, range 7-16m, 7 sites

Crown cover avg. = 70.0%, range 61.0-79.0%, 2 sites

Stem density/ha avg. = 280, range 240-320, 2 sites

Dominant species (relative cover, frequency): *Eucalyptus robusta* (56, 100%), *Melaleuca quinquenervia* (51, 71%)

Frequent species (cover, frequency): *Eucalyptus robusta* (17, 100%), *Melaleuca quinquenervia* (16, 71%), *Elaeocarpus obovatus* (1, 14%), *Lophostemon suaveolens* (14%), *Melaleuca leucadendra* (4, 14%)

#### Stratum: T2

Height avg. = 5.8m, range 3-8m, 4 sites

Crown cover avg. = 20.0%, range 16.0-24.0%, 2 sites

Stem density/ha avg. = 520, range 80-960, 2 sites

Dominant species (relative cover, frequency): *Acacia flavescens* (75, 29%), *Eucalyptus robusta* (36, 43%), *Acacia leptocarpa* (32, 29%), *Melicope elleryana* (20, 29%), *Endiandra sieberi* (17, 29%)

Frequent species (cover, frequency): *Eucalyptus robusta* (9, 43%), *Melaleuca quinquenervia* (3, 43%), *Acacia flavescens* (3, 29%), *Acacia leptocarpa* (8, 29%), *Endiandra sieberi* (4, 29%), *Melicope elleryana* (7, 29%), *Pandanus tectorius* (3, 29%), *Acacia julifera* subsp. *curvinervia* (5, 14%), *Banksia robur* (40, 14%), *Elaeocarpus reticulatus* (14%), *Leptospermum polygalifolium* (20, 14%), *Melaleuca viridiflora* var. *viridiflora* (14%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7b

### Stratum: S1

Height avg. = 2.9m, range 2-4m, 5 sites

Crown cover avg. = 61.5%, range 32.0-91.0%, 2 sites

Stem density/ha avg. = 5140, range 4080-6200, 2 sites

Dominant species (relative cover, frequency): *Leptospermum polygalifolium* (51, 71%), *Banksia robur* (45, 71%), *Melastoma malabathricum* subsp. *malabathricum* (18, 43%), *Acacia leptocarpa* (7, 43%), *Endiandra sieberi* (2, 29%)

Frequent species (cover, frequency): *Gahnia sieberiana* (38, 14%), *Lepironia articulata* (5, 14%), *Banksia robur* (17, 71%), *Leptospermum polygalifolium* (26, 71%), *Acacia leptocarpa* (3, 43%), *Melastoma malabathricum* subsp. *malabathricum* (13, 43%), *Endiandra sieberi* (1, 29%), *Melaleuca quinquenervia* (29%), *Acacia leiocalyx* (5, 14%), *Blechnum indicum* (38, 14%), *Jacksonia scoparia* (14%), *Leucopogon leptospermoides* (5, 14%), *Lithomyrtus obtusa* (14%), *Melastoma malabathricum* (1, 14%), *Ochrosperma lineare* (1, 14%), *Pandanus tectorius* (14%), *Persoonia virgata* (5, 14%), *Phyllota phylloides* (5, 14%), *Smilax glyciphylla* (14%)

### Stratum: S2

Height avg. = 2.0m, 1 site

Frequent species (cover, frequency): *Banksia robur* (20, 14%), *Melastoma malabathricum* subsp. *malabathricum* (20, 14%)

### Stratum: G

Height avg. = 0.9m, range 0.8-1m, 3 sites

PFC avg. = 50.0%, range 44-56%, 2 sites

Dominant species (relative cover, frequency): *Empodium minus* (43, 40%), *Xanthorrhoea fulva* (27, 40%), *Pteridium esculentum* (22, 40%), *Blechnum indicum* (19, 80%), *Gahnia sieberiana* (16, 60%)

Frequent species (cover, frequency): GRAMINOID: *Gahnia sieberiana* (9, 60%), *Schoenus calostachyus* (2, 60%), *Ottochloa nodosa* (40%), *Ancistrachne uncinulata* (20%), *Baumea muelleri* (3, 20%), *Entolasia marginata* (20%), *Eriachne indet.* (20%), *Ischaemum australe* (3, 20%)

FORBS: *Blechnum indicum* (11, 80%), *Empodium minus* (20, 40%), *Pimelea linifolia* (4, 40%), *Pteridium esculentum* (10, 40%), *Xanthorrhoea fulva* (23, 40%), *Acacia leptocarpa* (20%), *Baloskion pallens* (25, 20%), *Banksia robur* (2, 20%), *Cassytha filiformis* (20%), *Cassytha pubescens* (5, 20%), *Dapsilanthus ramosus* (20%), *Dianella caerulea* (3, 20%), *Drosera pygmaea* (20%), *Drosera spatulata* (13, 20%), *Endiandra sieberi* (1, 20%), *Gonocarpus micranthus* subsp. *ramosissimus* (13, 20%), *Hibbertia linearis* (3, 20%), *Hibbertia vestita* (5, 20%), *Hovea clavata* (20%), *Leptospermum polygalifolium* (1, 20%), *Leucopogon leptospermoides* (20, 20%), *Lithomyrtus obtusa* (20%), *Lomandra longifolia* (20, 20%), *Melastoma malabathricum* (1, 20%), *Melastoma malabathricum* subsp. *malabathricum* (5, 20%), *Mirbelia rubrifolia* (3, 20%), *Mitrasacme paludosa* (3, 20%), *Pandanus tectorius* (20%), *Phyllota phylloides* (20%)

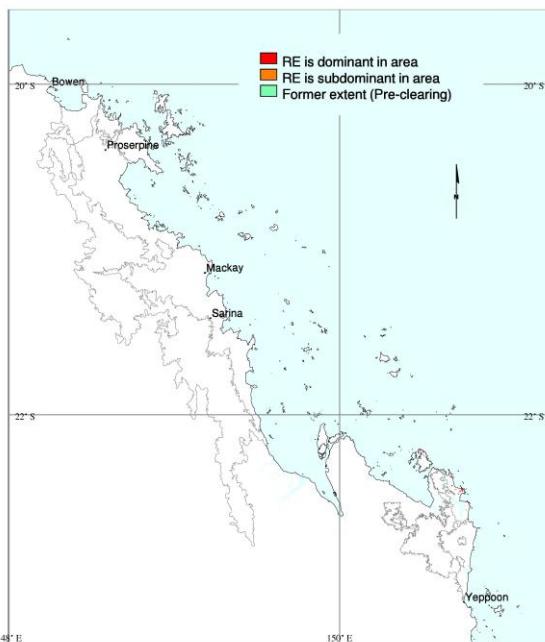
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Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

### Lophostemon suaveolens closed-forest in low-lying areas associated with parabolic dunes (subregions 4 and 5)



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 317 317 100%

Species recorded: Total: 110; woody: 58; ground: 68; Avg. spp./site: 37.8; std dev.: 15.1, 4 site(s)

Basal area: Avg./site: 39.0 m<sup>2</sup>/ha, range: 39.0 - 39 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Open-woodland: 17%; open-forest: 17%; closed-forest: 17%; unrecorded: 50%, 6 site(s)

Representative sites: 19942, 44383, 44439, 44849, 44871, 45016.

#### Stratum: T1

Height avg. = 13.8m, range 11-16m, 6 sites

Crown cover avg. = 87.0%, 1 site

Stem density/ha avg. = 440, 1 site

*Dominant species (relative cover, frequency): Lophostemon suaveolens (45, 100%), Melaleuca quinquenervia (35, 50%), Corymbia tessellaris (32, 33%), Lophostemon confertus (14, 33%), Corymbia intermedia (10, 33%)*

*Frequent species (cover, frequency): Lophostemon suaveolens (18, 100%), Melaleuca quinquenervia (3, 50%), Corymbia intermedia (1, 33%), Corymbia tessellaris (13, 33%), Lophostemon confertus (2, 33%), Allocasuarina littoralis (2, 17%), Banksia integrifolia subsp. compar (2, 17%), Cassytha filiformis (17%), Eucalyptus crebra (3, 17%), Eucalyptus exserta (3, 17%), Leptospermum neglectum (2, 17%), Livistona decora (7, 17%), Melaleuca dealbata (32, 17%), Petalostigma triloculare (2, 17%), Pittosporum ferrugineum (2, 17%)*

#### Stratum: T2

Height avg. = 6.5m, range 5-8m, 2 sites

Crown cover avg. = 30.0%, 1 site

Stem density/ha avg. = 600, 1 site

*Dominant species (relative cover, frequency): Allocasuarina littoralis (40, 50%), Planchonia careya (27, 33%), Banksia integrifolia subsp. compar (23, 50%), Livistona decora (5, 33%), Pouteria sericea (1, 33%)*

*Frequent species (cover, frequency): Allocasuarina littoralis (7, 50%), Banksia integrifolia subsp. compar (3, 50%), Livistona decora (1, 33%), Planchonia careya (5, 33%), Pouteria sericea (33%), Acacia disparrima subsp. disparrima (10, 17%), Acacia julifera subsp. curvinervia (5, 17%), Allocasuarina torulosa (5, 17%), Corymbia intermedia (17%), Cupaniopsis anacardioides (5, 17%), Eucalyptus exserta (2, 17%), Exocarpos latifolius (5, 17%), Jasminum didymum (17%), Litsea fawcettiana (17%), Lophostemon confertus (2, 17%), Lophostemon suaveolens (13, 17%), Melaleuca dealbata (4, 17%), Melaleuca quinquenervia (17%), Pittosporum ferrugineum (17%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7c

### Stratum: T3

Height avg. = 2.8m, range 2.5-3m, 2 sites

Crown cover avg. = 50.0%, 1 site

Stem density/ha avg. = 6680, 1 site

Dominant species (relative cover, frequency): *Passiflora suberosa\** (15, 33%), *Pittosporum ferrugineum* (10, 33%), *Planchonia careya* (7, 33%), *Diospyros geminata* (3, 33%)

Frequent species (cover, frequency): *Diospyros geminata* (1, 33%), *Passiflora suberosa\** (3, 33%), *Pittosporum ferrugineum* (3, 33%), *Planchonia careya* (2, 33%), *Acacia flavescentia* (17%), *Acacia julifera* subsp. *curvinervia* (17%), *Acacia leptocarpa* (2, 17%), *Acronychia laevis* (17%), *Allocasuarina littoralis* (17%), *Alphitonia excelsa* (17%), *Banksia integrifolia* subsp. *compar* (15, 17%), *Breynia oblongifolia* (17%), *Cassytha pubescens* (17%), *Clematis glycinoides* (17%), *Clerodendrum floribundum* (17%), *Corymbia intermedia* (17%), *Corymbia tessellaris* (17%), *Crotalaria mitchellii* subsp. *mitchellii* (17%), *Cupaniopsis anacardioides* (5, 17%), *Cyclophyllum coprosmoides* (17%), *Dodonaea viscosa* (1, 17%), *Endiandra sieberi* (17%), *Euroschinus falcatus* (17%), *Exocarpos latifolius* (5, 17%), *Ficus opposita* (17%), *Glochidion ferdinandii* (17%), *Jagera pseudorhus* var. *pseudorhus* (17%), *Jasminum didymum* (17%), *Jasminum simplicifolium* (17%), *Lithomyrtus obtusa* (17%), *Litsea fawcettiana* (17%), *Livistona decora* (17%), *Lophostemon confertus* (5, 17%), *Lophostemon suaveolens* (8, 17%), *Melaleuca dealbata* (6, 17%), *Melaleuca quinquenervia* (17%), *Petalostigma pubescens* (17%), *Petalostigma triloculare* (17%), *Pityrodia salviifolia* (17%), *Polyalthia nitidissima* (17%), *Pouteria sericea* (2, 17%), *Psychotria daphnoides* (17%), *Scolopia braunii* (17%), *Stephania japonica* (17%)

### Stratum: S1

Height avg. = 2.7m, range 1-4m, 3 sites

Dominant species (relative cover, frequency): *Cupaniopsis anacardioides* (39, 33%), *Acacia flavescentia* (9, 33%), *Alphitonia excelsa* (6, 33%), *Jagera pseudorhus* var. *pseudorhus* (3, 33%), *Breynia oblongifolia* (3, 33%)

Frequent species (cover, frequency): *Acacia flavescentia* (5, 33%), *Alphitonia excelsa* (5, 33%), *Breynia oblongifolia* (3, 33%), *Cupaniopsis anacardioides* (11, 33%), *Jagera pseudorhus* var. *pseudorhus* (3, 33%), *Acacia leptocarpa* (5, 17%), *Acronychia laevis* (5, 17%), *Allocasuarina littoralis* (5, 17%), *Banksia integrifolia* subsp. *compar* (10, 17%), *Cryptocarya triplinervis* (5, 17%), *Dodonaea viscosa* (40, 17%), *Grevillea banksii* (20, 17%), *Hovea* indet. (2, 17%), *Jacksonia scoparia* (10, 17%), *Jasminum simplicifolium* subsp. *australiense* (5, 17%), *Lantana camara\** (20, 17%), *Lithomyrtus obtusa* (5, 17%), *Livistona decora* (5, 17%), *Lophostemon suaveolens* (10, 17%), *Passiflora suberosa\** (20, 17%), *Persoonia virgata* (5, 17%), *Petalostigma pubescens* (5, 17%), *Planchonia careya* (17%), *Pouteria pohlmaniana* (17%)

### Stratum: G

Height avg. = 0.6m, range 0.4-0.8m, 2 sites

PFC avg. = 24.0%, 1 site

Dominant species (relative cover, frequency): *Passiflora suberosa\** (35, 50%), *Jasminum simplicifolium* subsp. *australiense* (27, 25%), *Jasminum simplicifolium* (16, 25%), *Imperata cylindrica* (12, 75%), *Dianella caerulea* (11, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperus ernevis* (3, 75%), *Imperata cylindrica* (9, 75%), *Fimbristylis* indet. (4, 50%), *Paspalidium gausum* (3, 50%), *Themeda triandra* (3, 50%), *Alloteropsis semialata* (25%), *Aristida calycina* var. *calycina* (25%), *Aristida* indet. (5, 25%), *Arundinella nepalensis* (2, 25%), *Baumea juncea* (2, 25%), *Cymbopogon refractus* (25%), *Cyperus scaber* (25%), *Digitaria brownii* (25%), *Digitaria ramularis* (25%), *Entolasia stricta* (10, 25%), *Eremochloa bimaculata* (1, 25%), *Eriachne* indet. (5, 25%), *Eriachne pallescens* (10, 25%), *Eriachne pallescens* var. *pallescens* (25%), *Heteropogon contortus* (25%), *Lepidosperma laterale* (2, 25%), *Mnesithea rotboellioides* (25%), *Oplismenus* indet. (2, 25%), *Panicum effusum* (2, 25%), *Panicum simile* (5, 25%), *Paspalidium distans* (25%), *Paspalum* indet. (2, 25%), *Schoenus sparteus* (2, 25%)

FORBS: *Dianella caerulea* (9, 100%), *Xanthorrhoea latifolia* subsp. *latifolia* (3, 75%), *Jasminum didymum* (3, 50%), *Passiflora suberosa\** (15, 50%), *Stephania japonica* (4, 50%), *Acacia disparrima* subsp. *disparrima* (10, 25%), *Alphitonia excelsa* (25%), *Bossiaea* indet. (2, 25%), *Breynia oblongifolia* (25%), *Cheilanthes tenuifolia* (25%), *Clerodendrum floribundum* (1, 25%), *Comesperma esulifolium* (25%), *Corymbia tessellaris* (1, 25%), *Eustrephus latifolius* (10, 25%), *Flemingia parviflora* (25%), *Geodorum densiflorum* (25%), *Grevillea banksii* (10, 25%), *Hovea clavata* (2, 25%), *Hybanthus enneaspermus* (25%), *Hybanthus stellaroides* (25%), *Jasminum didymum* subsp. *racemosum* (5, 25%), *Jasminum simplicifolium* (4, 25%), *Jasminum simplicifolium* subsp. *australiense* (20, 25%), *Keraudrenia lanceolata* (2, 25%), *Lindsaea ensifolia* subsp. *ensifolia* (2, 25%), *Livistona decora* (25%), *Lomandra confertifolia* (25%), *Lophostemon confertus* (2, 25%), *Monotoca scoparia* (25%), *Oxalis corniculata\** (25%), *Pandanus tectorius* (2, 25%), *Planchonia careya* (2, 25%), *Pseuderanthemum variabile* (2, 25%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

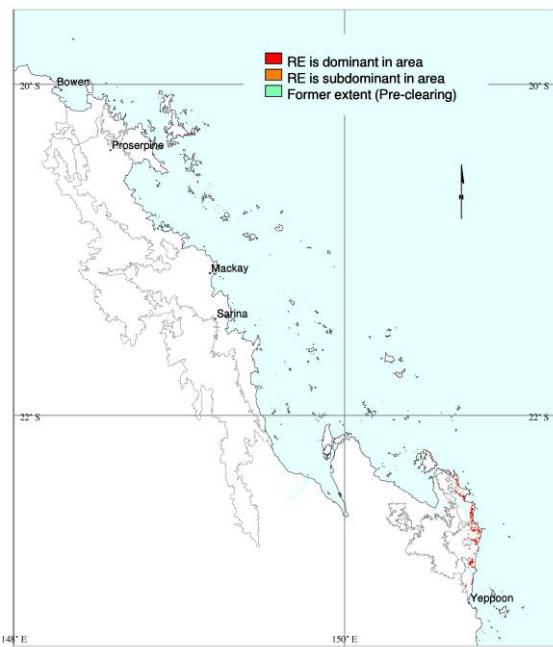
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7e

**Melaleuca quinquenervia and/or M. leucadendra and/or M. dealbata and/or M. viridiiflora low open-forest in near-coastal wetlands and swales associated with parabolic dunes (all coastal subregions)**



Rosemary Lovatt

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 2,445 2,380 97%

Species recorded: Total: 228; woody: 110; ground: 154; Avg. spp./site: 22.2; std dev.: 8.9, 18 site(s)

Basal area: Avg./site: 25.8 m<sup>2</sup>/ha, range: 12.0 - 56 m<sup>2</sup>/ha, std. deviation: 14 m<sup>2</sup>/ha, 6 site(s)

Structural formation: Open-forest: 21%; woodland: 7%; low woodland: 7%; low open-forest: 7%; sedgeland: 3%; closed-forest: 3%; unrecorded: 52%, 29 site(s)

Representative sites: 19955, 27142, 27150, 31287, 36884, 40903, 44203, 44329, 44330, 44374, 44448, 44449, 44452, 44455, 44766, 44767, 44771, 44773, 44774, 44833, 44835, 44856, 44857, 44858, 44968, 44970, 44977, 44983, 45000.

### Stratum: E

Height avg. = 7.8m, range 1.7-13m, 4 sites

*Frequent species (cover, frequency): Corymbia intermedia (5, 7%), Banksia robur (20, 3%), Corymbia tessellaris (2, 3%), Leptospermum indet. (3%), Leptospermum polygalifolium (20, 3%), Lophostemon suaveolens (20, 3%), Melaleuca quinquenervia (5, 3%), Melastoma malabathricum subsp. malabathricum (5, 3%), Pandanus tectorius (3%)*

### Stratum: T1

Height avg. = 12.7m, range 5-25m, 22 sites

Crown cover avg. = 77.2%, range 30.0-98.0%, 6 sites

Stem density/ha avg. = 608, range 150-960, 6 sites

*Dominant species (relative cover, frequency): Melaleuca quinquenervia (89, 31%), Melaleuca leucadendra (73, 38%), Corymbia tessellaris (17, 24%), Banksia integrifolia subsp. compar (11, 21%), Lophostemon suaveolens (10, 21%)*

*Frequent species (cover, frequency): Melaleuca leucadendra (28, 38%), Melaleuca quinquenervia (54, 31%), Corymbia tessellaris (8, 24%), Banksia integrifolia subsp. compar (4, 21%), Lophostemon suaveolens (4, 21%), Melaleuca viridiiflora var. viridiiflora (21, 17%), Allocasuarina littoralis (7, 14%), Planchonia careya (2, 10%), Acacia flavescent (10, 7%), Livistona decora (4, 7%), Melaleuca indet. (50, 7%), Acacia crassicarpa (7, 3%), Acacia disparrima subsp. disparrima (3%), Acacia julifera subsp. curvinervia (2, 3%), Acacia melanoxylon (3, 3%), Acronychia laevis (3, 3%), Banksia integrifolia (3%), Corymbia intermedia (2, 3%), Dendrobium canaliculatum (3%), Eucalyptus tereticornis (12, 3%), Grevillea banksii (1, 3%), Lophostemon confertus (3%), Melaleuca dealbata (20, 3%), Timonius timon var. timon (1, 3%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7e

### Stratum: T2

Height avg. = 6.6m, range 3-10m, 17 sites

Crown cover avg. = 29.2%, range 1.0-60.0%, 6 sites

Stem density/ha avg. = 830, range 80-3300, 6 sites

Dominant species (relative cover, frequency): *Acacia flavescens* (19, 24%), *Banksia integrifolia* subsp. *compar* (16, 21%), *Planchonia careya* (15, 24%)

Frequent species (cover, frequency): *Acacia flavescens* (9, 24%), *Planchonia careya* (6, 24%), *Banksia integrifolia* subsp. *compar* (4, 21%), *Acacia julifera* subsp. *curvinervia* (10, 17%), *Allocasuarina littoralis* (5, 17%), *Melaleuca quinquenervia* (14, 14%), *Melaleuca leucadendra* (20, 10%), *Petalostigma triloculare* (10%), *Acacia disparrima* subsp. *disparrima* (2, 7%), *Acacia leptocarpa* (10, 7%), *Banksia robur* (21, 7%), *Grevillea banksii* (1, 7%), *Leptospermum polygalifolium* (30, 7%), *Livistona decora* (7%), *Petalostigma pubescens* (3, 7%), *Acacia disparrima* (3%), *Alectryon connatus* (3%), *Alphitonia excelsa* (5, 3%), *Banksia integrifolia* (43, 3%), *Casuarina equisetifolia* subsp. *incana* (1, 3%), *Corymbia tessellaris* (5, 3%), *Cryptocarya triplinervis* (20, 3%), *Cyclophyllum coprosmoides* (3%), *Dendrobium canaliculatum* (3%), *Dendrobium discolor* (3%), *Dendrophthoe glabrescens* (3%), *Diospyros indet.* (3%), *Dodonaea viscosa* (3%), *Drynaria rigidula* (3%), *Endiandra sieberi* (3%), *Ficus rubiginosa* (3%), *Jagera pseudorhus* var. *pseudorhus* (5, 3%), *Leptospermum neglectum* (3, 3%), *Melaleuca indet.* (14, 3%), *Melaleuca viridiiflora* var. *viridiiflora* (40, 3%), *Melicope elleryana* (3%), *Micromelum minutum* (3%), *Monotoca scoparia* (3%), *Myristica globosa* subsp. *muelleri* (3%), *Nauclea orientalis* (46, 3%), *Pandanus indet.* (3%), *Pandanus tectorius* (3%), *Pittosporum ferrugineum* (3%), *Pittosporum indet.* (2, 3%), *Sterculia quadrifida* (3%)

### Stratum: T3

Height avg. = 3.7m, range 3.5-4m, 5 sites

Crown cover avg. = 16.0%, 1 site

Stem density/ha avg. = 400, 1 site

Frequent species (cover, frequency): *Acacia disparrima* subsp. *disparrima* (4, 7%), *Acacia flavescens* (6, 7%), *Banksia integrifolia* subsp. *compar* (2, 7%), *Cupaniopsis anacardioides* (4, 7%), *Acacia julifera* subsp. *curvinervia* (5, 3%), *Alchornea thozetiana* (3%), *Allocasuarina littoralis* (30, 3%), *Dodonaea triquetra* (2, 3%), *Dodonaea viscosa* (3%), *Exocarpos latifolius* (3%), *Grevillea banksii* (5, 3%), *Leptospermum neglectum* (2, 3%), *Livistona decora* (2, 3%), *Melaleuca quinquenervia* (17, 3%), *Pandanus tectorius* (2, 3%), *Planchonia careya* (2, 3%)

### Stratum: S1

Height avg. = 2.4m, range 1-6m, 15 sites

Crown cover avg. = 6.0%, range 1.0-10.0%, 5 sites

Stem density/ha avg. = 1528, range 120-4000, 5 sites

Dominant species (relative cover, frequency): *Banksia robur* (41, 21%), *Lithomyrtus obtusa* (25, 34%), *Cupaniopsis anacardioides* (16, 24%), *Alphitonia excelsa* (8, 21%)

Frequent species (cover, frequency): *Gahnia sieberiana* (5, 3%), *Lepironia articulata* (5, 3%), *Lithomyrtus obtusa* (7, 34%), *Cupaniopsis anacardioides* (7, 24%), *Alphitonia excelsa* (4, 21%), *Banksia robur* (10, 21%), *Allocasuarina littoralis* (1, 14%), *Exocarpos latifolius* (7, 14%), *Melaleuca quinquenervia* (4, 14%), *Diospyros geminata* (2, 10%), *Ficus congesta* var. *congesta* (10%), *Ficus opposita* (10%), *Glochidion sumatranum* (10, 10%), *Grevillea banksii* (14, 10%), *Lantana camara\** (2, 10%), *Livistona decora* (10%), *Melastoma malabathricum* subsp. *malabathricum* (2, 10%), *Persoonia virgata* (1, 10%), *Planchonia careya* (10%), *Acacia crassarpa* (1, 7%), *Acacia flavescens* (7%), *Acacia leptocarpa* (7%), *Acronychia laevis* (1, 7%), *Banksia integrifolia* subsp. *compar* (1, 7%), *Bossiaea brownii* (8, 7%), *Empodium minus* (40, 7%), *Jagera pseudorhus* var. *pseudorhus* (10, 7%), *Leptospermum neglectum* (10, 7%), *Petalostigma pubescens* (5, 7%), *Petalostigma triloculare* (3, 7%), *Pittosporum ferrugineum* (1, 7%), *Timonius timon* var. *timon* (7%), *Acacia crassa* (3%), *Acacia disparrima* (3%), *Acacia indet.* (5, 3%), *Acacia simsii* (3%), *Baeckea frutescens* (5, 3%), *Banksia integrifolia* (3%), *Breynia oblongifolia* (3%), *Calamus indet.* (3%), *Chionanthus ramiflora* (3%), *Dodonaea viscosa* (5, 3%), *Endiandra sieberi* (5, 3%), *Eucalyptus tereticornis* (1, 3%), *Euroschinus falcatus* (3, 3%), *Glochidion ferdinandi* (3%), *Glochidion lobocarpum* (3%), *Gymnanthera oblonga* (3%), *Hibbertia linearis* (10, 3%), *Homalanthus nutans* (3%), *Jasminum didymum* (3%), *Jasminum didymum* subsp. *didymum* (5, 3%), *Jasminum simplicifolium* (20, 3%), *Jasminum simplicifolium* subsp. *australiense* (5, 3%), *Leptospermum polygalifolium* (3%), *Leucopogon leptospermoides* (20, 3%), *Lygodium microphyllum* (3%), *Macaranga involucrata* (3%), *Macaranga tanarius* (3%), *Mallotus philippensis* (3%), *Maytenus disperma* (3%), *Melaleuca indet.* (3%), *Melaleuca leucadendra* (10, 3%), *Melicope elleryana* (3%), *Pandanus cookii* (1, 3%), *Pandanus indet.* (3%), *Pandanus tectorius* (3%), *Phyllota phylloides* (5, 3%), *Pityrodia salviifolia* (3%), *Polyalthia nitidissima* (3%), *Quassia bidwillii* (3%), *Sprengelia sprengelioides* (5, 3%), *Stephania japonica* (3%), *Xanthorrhoea latifolia* subsp. *latifolia* (5, 3%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.7e

### Stratum: S2

Height avg. = 1.5m, 1 site

Crown cover avg. = 0.0%, 1 site

Frequent species (cover, frequency): *Baumea rubiginosa* (20, 3%), *Baloskion pallens* (5, 3%), *Cassytha filiformis* (5, 3%), *Drosera binata* (5, 3%), *Hovea clavata* (5, 3%), *Lomandra longifolia* (3%), *Melaleuca quinquenervia* (3%), *Mirbelia rubrifolia* (5, 3%), *Stylosanthes* indet. (3%)

### Stratum: G

Height avg. = 0.7m, range 0.1-1.2m, 12 sites

PFC avg. = 34.7%, range 2-76%, 6 sites

Dominant species (relative cover, frequency): *Blechnum indicum* (30, 28%), *Passiflora suberosa*\* (21, 28%), *Schoenus brevifolius* (16, 33%), *Baloskion pallens* (14, 44%), *Imperata cylindrica* (13, 39%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (7, 39%), *Schoenus brevifolius* (10, 33%), *Ottochloa nodosa* (8, 22%), *Themeda triandra* (7, 22%), *Ectrosia leporina* (6, 17%), *Eragrostis interrupta* (7, 17%), *Eriachne pallescens* var. *pallescens* (17%), *Lepironia articulata* (8, 17%), *Paspalidium distans* (1, 17%), *Paspalum scrobiculatum* (5, 17%), *Baumea rubiginosa* (6, 11%), *Bulbostylis barbata* (16, 11%), *Cyperaceae* indet. (9, 11%), *Cyperus decompositus* (2, 11%), *Cyperus enervis* (13, 11%), *Cyperus haspan* (33, 11%), *Cyperus* indet. (1, 11%), *Fimbristylis pauciflora* (15, 11%), *Ischaemum fragile* (11%), *Lepidosperma longitudinale* (9, 11%), *Paspalidium gausium* (11%), *Paspalidium* indet. (5, 11%), *Poaceae* indet. (11%), *Schoenus calostachyus* (6, 11%), *Aristida calycina* var. *calycina* (12, 6%), *Baumea juncea* (20, 6%), *Cyperus javanicus* (6%), *Cyperus polystachyos* var. *polystachyos* (6%), *Cyperus scaber* (6%), *Dichanthium sericeum* (6%), *Digitaria ramularis* (6%), *Entolasia stricta* (20, 6%), *Eragrostis brownii* (1, 6%), *Eriachne pallescens* (5, 6%), *Eriachne pallescens* var. *gracilis* (6%), *Fimbristylis acicularis* (3, 6%), *Gahnia sieberiana* (22, 6%), *Ischaemum australe* (13, 6%), *Juncus continuus* (6%), *Oplismenus aemulus* (5, 6%), *Oplismenus compositus* (6%), *Paspalum longifolium* (6%), *Phragmites australis* (6%), *Rhynchospora brownii* (3, 6%), *Sacciolepis indica* (3, 6%), *Schoenoplectus litoralis* (20, 6%), *Setaria surgens* (3, 6%), *Trachystylis stradbrokeensis* (1, 6%)

FORBS: *Baloskion pallens* (11, 44%), *Dianella caerulea* (8, 33%), *Blechnum indicum* (24, 28%), *Passiflora suberosa*\* (15, 28%), *Eustrephus latifolius* (22%), *Passiflora foetida*\* (22%), *Flemingia parviflora* (17%), *Hibbertia linearis* (1, 17%), *Jasminum didymum* (2, 17%), *Lithomyrtus obtusa* (6, 17%), *Melaleuca quinquenervia* (17%), *Xyris juncea* (9, 17%), *Alpinia excelsa* (3, 11%), *Cassytha filiformis* (6, 11%), *Cupaniopsis anacardioides* (3, 11%), *Drosera spatulata* (10, 11%), *Gonocarpus micranthus* (3, 11%), *Lindsaea ensifolia* (12, 11%), *Lomandra longifolia* (16, 11%), *Lygodium microphyllum* (1, 11%), *Pimelea linifolia* (9, 11%), *Stephania japonica* (11%), *Triumfetta rhomboidea*\* (11%), *Acacia flavescens* (6%), *Acacia julifera* subsp. *curvinervia* (6%), *Acmena smithii* (3, 6%), *Acrostichum speciosum* (10, 6%), *Allocasuarina littoralis* (6%), *Banksia robur* (6%), *Bossiaea* indet. (6%), *Breynia oblongifolia* (6%), *Centella asiatica* (5, 6%), *Coronidium rupicola* (6%), *Crotalaria mitchellii* (6%), *Dapsilanthus elatior* (6%), *Dapsilanthus ramosus* (6%), *Desmodium heterocarpon* var. *strigosum* (6%), *Desmodium* indet. (6%), *Dianella longifolia* var. *longifolia* (1, 6%), *Drosera binata* (3, 6%), *Emilia sonchifolia*\* (1, 6%), *Epacris microphylla* (3, 6%), *Eriocaulon scariosum* (6%), *Exocarpos latifolius* (6%), *Geitonoplesium cymosum* (6%), *Gnaphalium* indet. (5, 6%), *Gonocarpus* indet. (3, 6%), *Gymnanthera oblonga* (6%), *Hardenbergia violacea* (1, 6%), *Helichrysum* indet. (3, 6%), *Homoranthus virgatus* (6%), *Ipomoea pes-caprae* (2, 6%), *Ipomoea pes-caprae* subsp. *brasiliensis* (6%), *Jacksonia scoparia* (6%), *Jagera pseudorhus* var. *pseudorhus* (6%), *Jasminum didymum* subsp. *didymum* (5, 6%), *Leptospermum neglectum* (6%), *Leucopogon leptospermoides* (6%), *Lindsaea ensifolia* subsp. *ensifolia* (3, 6%), *Lomandra* indet. (6%), *Mallotus mollissimus* (6%), *Marsdenia fraseri* (6%), *Maytenus disperma* (6%), *Melaleuca viridiiflora* var. *viridiiflora* (2, 6%), *Melicope elleryana* (3, 6%), *Nephrolepis hirsutula* (2, 6%), *Petalostigma triloculare* (6%), *Philydrum lanuginosum* (17, 6%), *Phyllota phylloides* (3, 6%), *Pityrodia salvifolia* (1, 6%), *Poranthera microphylla* (5, 6%), *Pouteria sericea* (6%), *Smilax glyciphylla* (3, 6%), *Sonchus oleraceus*\* (5, 6%), *Spermacoce brachystema* (6%), *Stachytarpheta jamaicensis*\* (5, 6%), *Tylophora benthamii* (6%), *Utricularia bifida* (3, 6%), *Utricularia lateriflora* (17, 6%), *Vigna vexillata* var. *youngiana* (6%), *Wikstroemia indica* (6%), *Xanthorrhoea fulva* (12, 6%), *Xyris complanata* (3, 6%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

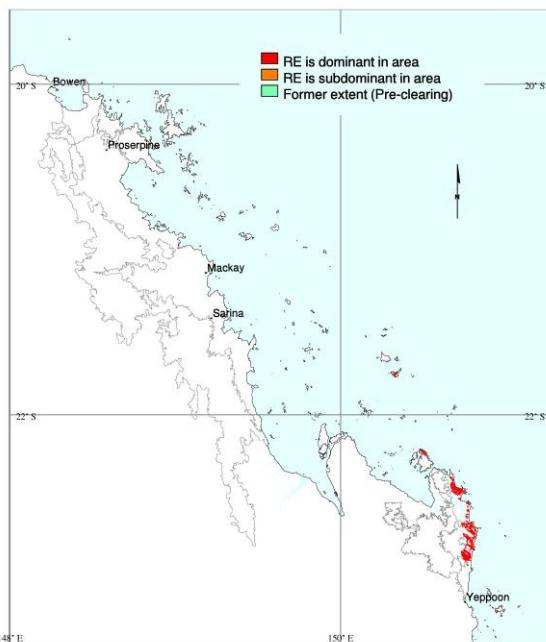
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8a

### Corymbia spp. and/or Eucalyptus spp. open-forest on Pleistocene parabolic dunes (subregions 4 and 5)



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 10,697 10,687 100%

Species recorded: Total: 177; woody: 82; ground: 133; Avg. spp./site: 29.1; std dev.: 7.6, 12 site(s)

Basal area: Avg./site: 13.3 m<sup>2</sup>/ha, range: 11.5 - 15 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Open-forest: 16%; woodland: 9%; low woodland: 6%; low open-forest: 3%; unrecorded: 66%, 32 site(s)

Representative sites: 19966, 40770, 44172, 44198, 44201, 44202, 44376, 44377, 44378, 44380, 44382, 44384, 44438, 44450, 44451, 44603, 44605, 44761, 44762, 44763, 44768, 44770, 44802, 44841, 44851, 44855, 44863, 44864, 44870, 44925, 44927, 45011.

#### Stratum: E

Height avg. = 17.5m, range 13-22m, 2 sites

*Frequent species (cover, frequency): Corymbia intermedia (20, 3%), Corymbia tessellaris (5, 3%), Livistona decora (3%), Lophostemon suaveolens (5, 3%)*

#### Stratum: T1

Height avg. = 11.2m, range 3.5-20m, 28 sites

Crown cover avg. = 70.5%, range 55.0-86.0%, 2 sites

Stem density/ha avg. = 90, range 80-100, 2 sites

*Dominant species (relative cover, frequency): Eucalyptus portuensis (56, 22%), Corymbia intermedia (41, 53%), Corymbia tessellaris (28, 34%), Banksia integrifolia subsp. compar (18, 38%)*

*Frequent species (cover, frequency): Corymbia intermedia (13, 53%), Banksia integrifolia subsp. compar (4, 38%), Corymbia tessellaris (5, 34%), Eucalyptus portuensis (17, 22%), Acacia flavescens (9, 19%), Corymbia clarksoniana (8, 19%), Lophostemon suaveolens (4, 19%), Acacia julifera subsp. curvinervia (7, 16%), Allocasuarina littoralis (5, 16%), Eucalyptus exserta (12, 16%), Planchonia careya (1, 16%), Eucalyptus crebra (7, 9%), Eucalyptus latisinensis (9, 9%), Acacia disperrima subsp. disperrima (10, 6%), Corymbia trachyphloia (4, 6%), Acacia crassa (1, 3%), Allocasuarina torulosa (6, 3%), Alphitonia excelsa (3%), Amyema congener (6, 3%), Chionanthus ramiflora (3, 3%), Grevillea banksii (1, 3%), Leptospermum neglectum (3, 3%), Leptospermum polygalifolium (3%), Lophostemon confertus (9, 3%), Melaleuca leucadendra (5, 3%), Melaleuca viridiflora var. viridiflora (16, 3%), Petalostigma pubescens (1, 3%), Syncarpia glomulifera (13, 3%), Viscum articulatum (6, 3%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8a

### Stratum: T2

Height avg. = 6.3m, range 2.5-14m, 21 sites

Crown cover avg. = 5.5%, range 1.0-10.0%, 2 sites

Stem density/ha avg. = 370, range 160-580, 2 sites

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (36, 41%), *Acacia julifera* subsp. *curvinervia* (35, 34%), *Banksia integrifolia* subsp. *compar* (30, 50%), *Acacia flavescens* (27, 56%), *Leptospermum neglectum* (18, 22%)

Frequent species (cover, frequency): *Acacia flavescens* (8, 56%), *Banksia integrifolia* subsp. *compar* (6, 50%), *Allocasuarina littoralis* (10, 41%), *Acacia julifera* subsp. *curvinervia* (13, 34%), *Planchonia careya* (4, 28%), *Leptospermum neglectum* (3, 22%), *Grevillea banksii* (7, 16%), *Petalostigma triloculare* (8, 13%), *Petalostigma pubescens* (8, 9%), *Allocasuarina torulosa* (13, 6%), *Corymbia intermedia* (20, 6%), *Corymbia tessellaris* (1, 6%), *Cymbidium madidum* (6%), *Dodonaea viscosa* (11, 6%), *Eucalyptus portuensis* (5, 6%), *Jacksonia scoparia* (6%), *Acacia disparrima* (3%), *Acacia disparrima* subsp. *disparrima* (20, 3%), *Acacia leiocalyx* (10, 3%), *Acacia leptocarpa* (5, 3%), *Banksia integrifolia* (4, 3%), *Corymbia clarksoniana* (5, 3%), *Corymbia trachyphloia* (5, 3%), *Cupaniopsis anacardioides* (3%), *Dodonaea lanceolata* var. *subsessilifolia* (5, 3%), *Endiandra sieberi* (2, 3%), *Glochidion lobocarpum* (5, 3%), *Livistona decora* (3%), *Lophostemon confertus* (5, 3%), *Persoonia virgata* (20, 3%), *Pouteria pohlmaniana* (3%), *Ricinocarpos pinifolius* (3%), *Timonius timon* var. *timon* (5, 3%)

### Stratum: T3

Height avg. = 4.1m, range 2.5-7m, 5 sites

Frequent species (cover, frequency): *Acacia flavescens* (4, 6%), *Acacia julifera* subsp. *curvinervia* (13, 6%), *Allocasuarina littoralis* (8, 6%), *Allocasuarina torulosa* (15, 6%), *Planchonia careya* (4, 6%), *Acacia disparrima* subsp. *disparrima* (20, 3%), *Acacia leptocarpa* (2, 3%), *Banksia integrifolia* subsp. *compar* (2, 3%), *Corymbia tessellaris* (2, 3%), *Cupaniopsis anacardioides* (2, 3%), *Eustrephus latifolius* (5, 3%), *Ficus opposita* (3%), *Grevillea banksii* (20, 3%), *Leptospermum indet.* (3%), *Petalostigma pubescens* (5, 3%), *Pityrodia salviifolia* (2, 3%), *Syncarpia glomulifera* (2, 3%)

### Stratum: S1

Height avg. = 2.2m, range 1-5m, 21 sites

Crown cover avg. = 7.0%, range 4.0-10.0%, 2 sites

Stem density/ha avg. = 690, range 560-820, 2 sites

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (35, 53%), *Acacia flavescens* (26, 25%), *Jacksonia scoparia* (25, 25%), *Persoonia virgata* (19, 25%), *Alphitonia excelsa* (16, 22%)

Frequent species (cover, frequency): *Heteropogon contortus* (5, 3%), *Imperata cylindrica* (3%), *Lithomyrtus obtusa* (9, 53%), *Acacia flavescens* (9, 25%), *Jacksonia scoparia* (5, 25%), *Leptospermum neglectum* (2, 25%), *Persoonia virgata* (5, 25%), *Alphitonia excelsa* (4, 22%), *Leucopogon leptospermoides* (7, 22%), *Acacia julifera* subsp. *curvinervia* (10, 16%), *Planchonia careya* (2, 16%), *Banksia integrifolia* subsp. *compar* (3, 13%), *Breynia oblongifolia* (3, 13%), *Hibbertia linearis* (6, 13%), *Petalostigma pubescens* (2, 13%), *Petalostigma triloculare* (4, 13%), *Pityrodia salviifolia* (8, 13%), *Xanthorrhoea latifolia* subsp. *latifolia* (20, 13%), *Dodonaea lanceolata* var. *subsessilifolia* (9%), *Glochidion lobocarpum* (1, 9%), *Grevillea banksii* (4, 9%), *Allocasuarina littoralis* (3, 6%), *Clerodendrum floribundum* (6%), *Corymbia intermedia* (20, 6%), *Homoranthus virgatus* (4, 6%), *Hovea clavata* (6%), *Jagera pseudorhus* var. *pseudorhus* (1, 6%), *Livistona decora* (1, 6%), *Platysace linearifolia* (3, 6%), *Acacia disparrima* (3%), *Acacia indet.* (3%), *Acrotriche aggregata* (2, 3%), *Brachyloma daphnoides* (2, 3%), *Cassytha filiformis* (3%), *Cassytha pubescens* (5, 3%), *Clematicissus opaca* (3%), *Eustrephus latifolius* (5, 3%), *Exocarpos cupressiformis* (10, 3%), *Ficus opposita* (3%), *Glochidion ferdinandi* (5, 3%), *Hibbertia indet.* (3%), *Hovea indet.* (10, 3%), *Jasminum didymum* (2, 3%), *Monotoca scoparia* (5, 3%), *Monotoca* sp. (*Fraser Island P.Baxter 777*) (1, 3%), *Pandanus indet.* (5, 3%), *Passiflora suberosa*\* (3%), *Phyllota phyllocoidea* (5, 3%), *Pimelea linifolia* (5, 3%), *Pouteria pohlmaniana* (3%), *Scolopia braunii* (3%), *Syncarpia glomulifera* (2, 3%), *Zieria laxiflora* (2, 3%)

### Stratum: S2

Height avg. = 1.3m, range 1-1.5m, 2 sites

Crown cover avg. = 10.0%, 1 site

Stem density/ha avg. = 2560, 1 site

Frequent species (cover, frequency): *Heteropogon contortus* (5, 3%), *Lithomyrtus obtusa* (13, 9%), *Pityrodia salviifolia* (3, 6%), *Acacia flavescens* (1, 3%), *Coronidium rupicola* (3%), *Hibbertia linearis* (20, 3%), *Leucopogon leptospermoides* (3%), *Persoonia virgata* (3%), *Platysace linearifolia* (10, 3%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8a

### Stratum: G

Height avg. = 0.8m, range 0.3-1m, 7 sites

PFC avg. = 33.5%, range 20-47%, 2 sites

Dominant species (relative cover, frequency): *Xanthorrhoea latifolia* subsp. *latifolia* (32, 50%), *Themeda triandra* (14, 75%), *Pteridium esculentum* (12, 92%), *Imperata cylindrica* (11, 75%), *Eriachne pallescens* (10, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (9, 75%), *Themeda triandra* (12, 75%), *Eriachne pallescens* (8, 50%), *Cyperus scaber* (6, 33%), *Entolasia stricta* (2, 33%), *Trachystylis stradbrokeensis* (6, 33%), *Paspalidium gaussum* (4, 25%), *Alloteropsis semialata* (17%), *Aristida* indet. (2, 17%), *Eremochloa bimaculata* (2, 17%), *Lepidosperma laterale* (1, 17%), *Panicum effusum* (4, 17%), *Aristida calycina* var. *calycina* (2, 8%), *Arundinella nepalensis* (2, 8%), *Bulbostylis barbata* (2, 8%), *Caustis recurvata* (19, 8%), *Cyperus decompositus* (6, 8%), *Cyperus javanicus* (8%), *Digitaria brownii* (8%), *Elionurus citreus* (1, 8%), *Eragrostis interrupta* (6, 8%), *Eriachne pallescens* var. *pallescens* (8%), *Ischaemum triticeum* (8%), *Megathyrsus maximus*\* (8%), *Panicum simile* (2, 8%), *Paspalidium* indet. (8%), *Paspalum* indet. (3, 8%), *Paspalum scrobiculatum* (8%), *Schoenus ornithopodoides* (8%), *Schoenus sparteus* (9, 8%), *Scleria mackaviensis* (2, 8%)

FORBS: *Pteridium esculentum* (10, 92%), *Dianella caerulea* (6, 75%), *Xanthorrhoea latifolia* subsp. *latifolia* (20, 50%), *Hibbertia linearis* (1, 33%), *Pimelea linifolia* (3, 33%), *Coronidium rupicola* (25%), *Eustrephus latifolius* (2, 25%), *Flemingia parviflora* (6, 25%), *Lithomyrtus obtusa* (1, 25%), *Pityrodia salvifolia* (2, 25%), *Pseuderanthemum variabile* (2, 25%), *Schizaea dichotoma* (3, 25%), *Acacia disparrima* subsp. *disparrima* (4, 17%), *Acacia flavescens* (3, 17%), *Alphitonia excelsa* (17%), *Bossiaea* indet. (5, 17%), *Cassytha filiformis* (1, 17%), *Corymbia intermedia* (7, 17%), *Dianella* indet. (1, 17%), *Galactia tenuiflora* (17%), *Glycine* indet. (4, 17%), *Helichrysum* indet. (2, 17%), *Leucopogon leptospermoides* (17%), *Lomandra confertifolia* subsp. *pallida* (3, 17%), *Lomandra* indet. (3, 17%), *Lomandra multiflora* subsp. *multiflora* (1, 17%), *Pandanus tectorius* (4, 17%), *Passiflora suberosa*\* (12, 17%), *Planchonia careya* (2, 17%), *Platysace linearifolia* (5, 17%), *Acacia julifera* subsp. *curvinervia* (8%), *Acacia leptocarpa* (8%), *Allocasuarina torulosa* (7, 8%), Angiosperm indet. (8%), *Banksia integrifolia* subsp. *compar* (6, 8%), *Brachyloma daphnoides* (8%), *Cassia tomentella* (2, 8%), *Cheilanthes tenuifolia* (2, 8%), *Cirsium vulgare*\* (8%), *Conyza* indet. (8%), *Cyanthillium cinereum* (8%), *Desmodium* indet. (3, 8%), *Diuris chrysanththa* (8%), *Dodonaea viscosa* (2, 8%), *Emilia sonchifolia*\* (6, 8%), *Empodiuma minus* (8%), *Eucalyptus portuensis* (2, 8%), *Grevillea banksii* (7, 8%), *Hardenbergia violacea* (8%), *Hibbertia linearis* var. *obtusifolia* (8%), *Hibbertia vestita* (5, 8%), *Hovea clavata* (7, 8%), *Ipomoea plebeia* (8%), *Jacksonia scoparia* (8%), *Jagera pseudodorhus* (8%), *Lomandra longifolia* (5, 8%), *Lophostemon suaveolens* (2, 8%), *Marsdenia* indet. (8%), *Patersonia sericea* (5, 8%), *Persoonia virgata* (8%), *Petalostigma triloculare* (8%), *Phyllota phylicoidea* (5, 8%), *Podolepis arachnoidea* (8%), *Podolepis longipedata* (5, 8%), *Polygonolobus reticulatus* (2, 8%), *Stephania japonica* (5, 8%), *Tephrosia filipes* (2, 8%), *Tricoryne elatior* (5, 8%), *Triumfetta rhomboidea*\* (3, 8%), *Xanthorrhoea johnsonii* (12, 8%)

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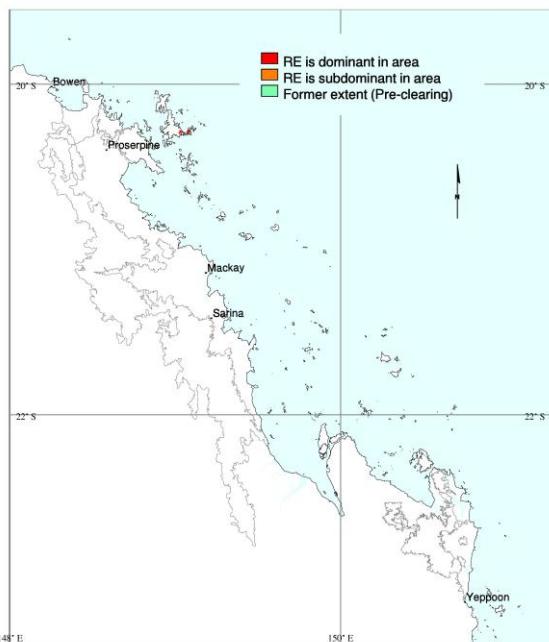
Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Eucalyptus exserta and Corymbia clarksoniana open-forest, on fine white coastal sands on Pleistocene parabolic dunes (subregion 1)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 440 440 100%

Species recorded: Total: 61; woody: 44; ground: 27; Avg. spp./site: 23.8; std dev.: 6.4, 4 site(s)

Basal area: Avg./site: 19.8 m<sup>2</sup>/ha, range: 14.0 - 27 m<sup>2</sup>/ha, std. deviation: 5 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Open-forest: 50%; woodland: 25%; open-woodland: 25%, 4 site(s)

Representative sites: 19518, 19520, 31288, 36209.

### Stratum: T1

Height avg. = 17.5m, range 14-21m, 2 sites

Crown cover avg. = 55.5%, range 18.0-72.0%, 4 sites

Stem density/ha avg. = 210, range 40-400, 4 sites

Dominant species (relative cover, frequency): *Eucalyptus exserta* (58, 75%), *Acacia flavescens* (31, 50%), *Corymbia tessellaris* (27, 75%), *Corymbia clarksoniana* (21, 75%), *Acacia crassicarpa* (4, 75%)

Frequent species (cover, frequency): *Acacia crassicarpa* (3, 75%), *Corymbia clarksoniana* (7, 75%), *Corymbia tessellaris* (18, 75%), *Eucalyptus exserta* (41, 75%), *Acacia flavescens* (8, 50%), *Chionanthus ramiflora* (25%), *Diospyros hebecarpa* (25%), *Euroschinus falcatus* (25%), *Exocarpos latifolius* (25%), *Jagera pseudorhus* var. *pseudorhus* (25%), *Lophostemon suaveolens* (25%), *Mimusops elengi* (25%), *Paraserianthes toona* (25%), *Sterculia quadrifida* (25%)

### Stratum: T2

Height avg. = 11.0m, range 7-15m, 2 sites

Crown cover avg. = 84.5%, range 61.0-100.0%, 4 sites

Stem density/ha avg. = 1330, range 200-2600, 4 sites

Dominant species (relative cover, frequency): *Acacia disperrima* (47, 25%), *Litsea bindoniana* (37, 25%), *Chionanthus ramiflora* (24, 75%), *Euroschinus falcatus* var. *angustifolius* (16, 25%), *Acacia crassicarpa* (14, 100%)

Frequent species (cover, frequency): *Acacia crassicarpa* (12, 100%), *Chionanthus ramiflora* (14, 75%), *Tabernaemontana orientalis* (1, 75%), *Diospyros hebecarpa* (9, 50%), *Eucalyptus exserta* (6, 50%), *Exocarpos latifolius* (5, 50%), *Jagera pseudorhus* var. *pseudorhus* (3, 50%), *Polyalthia nitidissima* (50%), *Acacia disperrima* (47, 25%), *Acacia flavescens* (25%), *Acronychia laevis* (25%), *Allocasuarina littoralis* (5, 25%), *Alphitonia excelsa* (25%), *Antidesma parvifolium* (25%), *Celtis paniculata* (25%), *Cupaniopsis anacardioides* (2, 25%), *Cyclophyllum coprosmoides* (25%), *Euroschinus falcatus* (25%), *Euroschinus falcatus* var. *angustifolius* (10, 25%), *Litsea bindoniana* (30, 25%), *Lophostemon confertus* (25%), *Pandanus cookii* (25%), *Planchonia careya* (6, 25%), *Polyscias elegans* (25%), *Sterculia quadrifida* (6, 25%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8b

### Stratum: T3

Height avg. = 7.0m, 1 site

Crown cover avg. = 100.0%, 1 site

Stem density/ha avg. = 1720, 1 site

Dominant species (relative cover, frequency): *Chionanthus ramiflora* (70, 25%), *Pouteria sericea* (16, 25%), *Diospyros hebecarpa* (7, 25%), *Acronychia laevis* (3, 25%), *Polyalthia nitidissima* (2, 25%)

Frequent species (cover, frequency): *Acronychia laevis* (4, 25%), *Celtis paniculata* (25%), *Chionanthus ramiflora* (71, 25%), *Cupaniopsis anacardioides* (25%), *Diospyros hebecarpa* (7, 25%), *Euroschinus falcatus* var. *angustifolius* (2, 25%), *Polyalthia nitidissima* (2, 25%), *Pouteria sericea* (16, 25%)

### Stratum: S1

Height avg. = 2.0m, range 1-3m, 2 sites

Crown cover avg. = 15.3%, range 2.0-31.0%, 4 sites

Stem density/ha avg. = 2080, range 40-4880, 3 sites

Dominant species (relative cover, frequency): *Pandanus* indet. (32, 25%), *Acacia disparrima* (25, 25%), *Ricinocarpos pinifolius* (25, 25%), *Acronychia laevis* (17, 50%), *Lithomyrtus obtusa* (16, 75%)

Frequent species (cover, frequency): *Chionanthus ramiflora* (4, 75%), *Exocarpos latifolius* (1, 75%), *Lantana camara*\* (1, 75%), *Lithomyrtus obtusa* (1, 75%), *Polyalthia nitidissima* (2, 75%), *Tabernaemontana orientalis* (75%), *Acacia crassicarpa* (3, 50%), *Acronychia laevis* (5, 50%), *Cryptocarya triplinervis* (1, 50%), *Pouteria sericea* (1, 50%), *Solanum corifolium* (50%), *Acacia disparrima* (5, 25%), *Acacia flavescens* (25%), *Allocasuarina littoralis* (1, 25%), *Alyxia spicata* (25%), *Anthobolus filifolius* (25%), *Antidesma parvifolium* (25%), *Celtis paniculata* (2, 25%), *Clerodendrum floribundum* (25%), *Cupaniopsis anacardioides* (25%), *Cyclophyllum coprosmoides* (25%), *Diospyros hebecarpa* (25%), *Eucalyptus exserta* (1, 25%), *Euroschinus falcatus* (25%), *Litsea bindoniana* (1, 25%), *Pandanus cookii* (1, 25%), *Pandanus* indet. (1, 25%), *Paraserianthes toona* (25%), *Polyscias elegans* (25%), *Psydrax odorata* (25%), *Ricinocarpos pinifolius* (5, 25%), *Scolopia braunii* (25%), *Xanthorrhoea latifolia* subsp. *latifolia* (25%)

### Stratum: S2

Height avg. = 1.5m, 1 site

Crown cover avg. = 15.0%, 1 site

Stem density/ha avg. = 240, 1 site

Dominant species (relative cover, frequency): *Chionanthus ramiflora* (33, 25%), *Acronychia laevis* (33, 25%), *Polyalthia nitidissima* (13, 25%), *Tabernaemontana orientalis* (7, 25%), *Exocarpos latifolius* (7, 25%)

Frequent species (cover, frequency): *Acronychia laevis* (5, 25%), *Celtis paniculata* (1, 25%), *Chionanthus ramiflora* (5, 25%), *Cupaniopsis anacardioides* (25%), *Exocarpos latifolius* (1, 25%), *Litsea fawcettiana* (25%), *Polyalthia nitidissima* (2, 25%), *Tabernaemontana orientalis* (1, 25%)

### Stratum: G

Height avg. = 1.0m, range 0.3-1.7m, 2 sites

PFC avg. = 8.3%, range 0-26%, 4 sites

Dominant species (relative cover, frequency): *Chionanthus ramiflora* (65, 25%), *Lomandra confertifolia* subsp. *pallida* (44, 25%), *Paraserianthes toona* (43, 25%), *Lithomyrtus obtusa* (37, 25%), *Lepidosperma* indet. (33, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Paspalidium gausum* (50%), *Trachystylis stradbrokeensis* (50%), *Cyperus enervis* (25%), *Cyperus scaber* (25%), *Eriachne insularis* (25%), *Fimbristylis* indet. (25%), *Lepidosperma* indet. (9, 25%), *Paspalidium* indet. (25%)

FORBS: *Parsonia lanceolata* (2, 50%), *Acacia crassicarpa* (2, 25%), *Acacia flavescens* (25%), *Alyxia spicata* (25%), *Anthobolus filifolius* (25%), *Cassytha* indet. (25%), *Celtis paniculata* (25%), *Chionanthus ramiflora* (1, 25%), *Commelinaceae* (25%), *Dianella caerulea* (25%), *Diospyros hebecarpa* (25%), *Eustrephus latifolius* (25%), *Lithomyrtus obtusa* (10, 25%), *Lomandra confertifolia* subsp. *pallida* (3, 25%), *Paraserianthes toona* (1, 25%), *Ricinocarpos pinifolius* (5, 25%), *Stephania japonica* (25%), *Tacca leontopetaloides* (25%), *Vitaceae* indet. (25%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

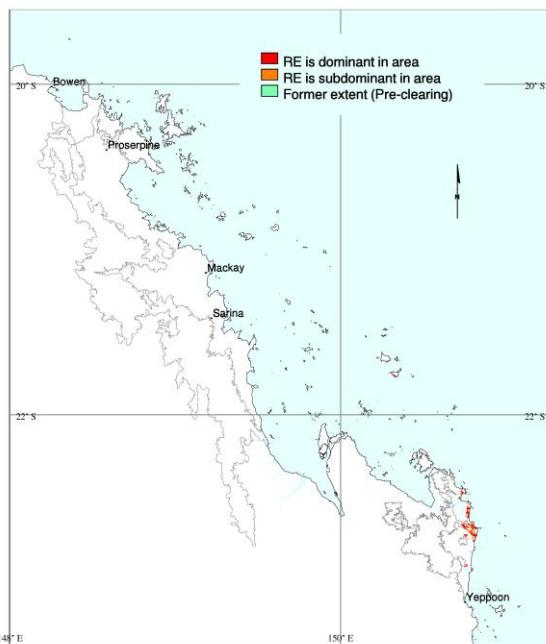
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8d

### **Acacia julifera and/or A. disparrima and/or Allocasuarina littoralis tall shrubland on Pleistocene parabolic dunes**



Pre-clearing area (ha), remnant area (ha) and per cent remaining: 2,136 2,136 100%

Species recorded: Total: 79; woody: 49; ground: 41; Avg. spp./site: 19.1; std dev.: 5.2, 8 site(s)

Basal area: Avg./site: 8.3 m<sup>2</sup>/ha, range: 4.0 - 15 m<sup>2</sup>/ha, std. deviation: 4 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Low woodland: 18%; low open-forest: 18%; tall shrubland: 9%; shrubland: 9%; open-scrub: 9%; unrecorded: 36%, 11 site(s)

Representative sites: 19939, 19941, 19946, 19962, 44373, 44379, 44639, 44829, 44840, 44850, 45015.

#### Stratum: E

Height avg. = 5.5m, range 4-7m, 2 sites

Crown cover avg. = 9.0%, range 9.0-9.0%, 2 sites

Stem density/ha avg. = 874, range 229-1520, 2 sites

Frequent species (cover, frequency): *Corymbia intermedia* (1, 18%), *Eucalyptus latisinensis* (8, 18%), *Acacia flavescens* (1, 9%), *Acacia julifera* subsp. *curvinervia* (9%), *Eucalyptus exserta* (9%), *Eucalyptus portuensis* (9%)

#### Stratum: T1

Height avg. = 5.8m, range 3.5-10m, 6 sites

Crown cover avg. = 43.0%, range 35.0-51.0%, 2 sites

Stem density/ha avg. = 2879, range 2500-3257, 2 sites

Dominant species (relative cover, frequency): *Acacia julifera* subsp. *curvinervia* (54, 27%), *Allocasuarina littoralis* (48, 45%), *Acacia flavescens* (19, 27%), *Leptospermum neglectum* (9, 27%), *Banksia integrifolia* subsp. *compar* (6, 36%)

Frequent species (cover, frequency): *Allocasuarina littoralis* (18, 45%), *Banksia integrifolia* subsp. *compar* (2, 36%), *Acacia flavescens* (8, 27%), *Acacia julifera* subsp. *curvinervia* (27, 27%), *Leptospermum neglectum* (4, 27%), *Corymbia intermedia* (4, 18%), *Corymbia tessellaris* (6, 18%), *Petalostigma pubescens* (2, 18%), *Alphitonia excelsa* (9%), *Dendrophthoe glabrescens* (9%), *Grevillea banksii* (9%), *Jacksonia scoparia* (9%), *Jagera pseudorhus* var. *pseudorhus* (3, 9%), *Lophostemon suaveolens* (4, 9%), *Planchonia careya* (5, 9%), *Ricinocarpos pinifolius* (9%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8d

### Stratum: T2

Height avg. = 3.0m, 1 site

Frequent species (cover, frequency): *Acacia flavescens* (13, 18%), *Acacia julifera* subsp. *curvinervia* (20, 9%), *Banksia integrifolia* subsp. *compar* (5, 9%), *Dodonaea viscosa* (5, 9%), *Grevillea banksii* (5, 9%), *Leptospermum polygalifolium* (20, 9%), *Planchonia careya* (5, 9%), *Platysace linearifolia* (20, 9%)

### Stratum: S1

Height avg. = 2.2m, range 0.8-4m, 7 sites

Crown cover avg. = 53.3%, range 10.0-93.0%, 4 sites

Stem density/ha avg. = 8786, range 820-18560, 4 sites

Dominant species (relative cover, frequency): *Leptospermum neglectum* (30, 36%), *Acacia flavescens* (30, 27%), *Pityrodia salvifolia* (28, 27%), *Lithomyrtus obtusa* (27, 36%), *Allocasuarina littoralis* (23, 64%)

Frequent species (cover, frequency): *Caustis recurvata* (5, 9%), *Allocasuarina littoralis* (12, 64%), *Grevillea banksii* (5, 45%), *Petalostigma pubescens* (7, 45%), *Alphitonia excelsa* (2, 36%), *Leptospermum neglectum* (10, 36%), *Lithomyrtus obtusa* (14, 36%), *Acacia flavescens* (12, 27%), *Banksia integrifolia* subsp. *compar* (7, 27%), *Phyllota phylloides* (2, 27%), *Pimelea linifolia* (27%), *Pityrodia salvifolia* (15, 27%), *Acacia disparrima* subsp. *disparrima* (14, 18%), *Acacia julifera* subsp. *curvinervia* (3, 18%), *Brachyloma daphnoides* (18%), *Dodonaea viscosa* (3, 18%), *Exocarpos cupressiformis* (2, 18%), *Homoranthus virgatus* (5, 18%), *Leucopogon leptospermoides* (10, 18%), *Ricinocarpus pinifolius* (13, 18%), *Acacia leiocalyx* (8, 9%), *Aegiceras corniculatum* (9%), *Cassytha filiformis* (9%), *Cassytha glabella* (9%), *Corymbia intermedia* (9%), *Cupaniopsis anacardioidea* (5, 9%), *Cyclophyllum coprosmoides* (9%), *Cyclophyllum coprosmoides* var. *spathulatum* (1, 9%), *Dendrophthoe glabrescens* (8, 9%), *Jacksonia scoparia* (1, 9%), *Jagera pseudorhus* var. *pseudorhus* (5, 9%), *Passiflora suberosa*\* (9%), *Persoonia virgata* (9%), *Petalostigma triloculare* (1, 9%), *Platysace linearifolia* (9%), *Scolopia braunii* (5, 9%), *Xanthorrhoea latifolia* subsp. *latifolia* (2, 9%)

### Stratum: S2

Height avg. = 1.1m, range 0.5-2m, 4 sites

Crown cover avg. = 33.7%, range 5.0-85.0%, 3 sites

Stem density/ha avg. = 980, range 340-1480, 3 sites

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (29, 27%), *Allocasuarina littoralis* (23, 27%), *Phyllota phylloides* (10, 36%)

Frequent species (cover, frequency): *Caustis recurvata* (10, 9%), *Phyllota phylloides* (2, 36%), *Allocasuarina littoralis* (4, 27%), *Lithomyrtus obtusa* (3, 27%), *Alphitonia excelsa* (18%), *Exocarpos cupressiformis* (3, 18%), *Leptospermum neglectum* (18%), *Petalostigma pubescens* (3, 18%), *Pityrodia salvifolia* (1, 18%), *Xanthorrhoea latifolia* subsp. *latifolia* (1, 18%), *Acacia disparrima* subsp. *disparrima* (9%), *Acacia flavescens* (2, 9%), *Acacia julifera* subsp. *curvinervia* (1, 9%), *Banksia integrifolia* subsp. *compar* (9%), *Brachyloma daphnoides* (8, 9%), *Cassytha filiformis* (1, 9%), *Cassytha glabella* (1, 9%), *Cissus repens* (9%), *Corymbia intermedia* (2, 9%), *Cyclophyllum coprosmoides* (9%), *Cyclophyllum coprosmoides* var. *spathulatum* (9%), *Grevillea banksii* (9%), *Hibbertia linearis* (9%), *Hibbertia linearis* var. *obtusifolia* (9%), *Homoranthus virgatus* (5, 9%), *Jacksonia scoparia* (2, 9%), *Lantana camara*\* (5, 9%), *Leucopogon leptospermoides* (20, 9%), *Ochrosperma lineare* (3, 9%), *Pimelea linifolia* (1, 9%), *Ricinocarpus pinifolius* (25, 9%)

### Stratum: G

Height avg. = 0.4m, range 0.2-1m, 4 sites

PFC avg. = 3.3%, range 0-11%, 4 sites

Dominant species (relative cover, frequency): *Schoenus ornithopodoides* (43, 25%), *Lithomyrtus obtusa* (33, 38%), *Paspalidium gausum* (32, 50%), *Dianella caerulea* (17, 50%), *Imperata cylindrica* (12, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Paspalidium gausum* (4, 50%), *Eriachne insularis* (38%), *Imperata cylindrica* (3, 25%), *Schoenus ornithopodoides* (25%), *Caustis recurvata* (13%), *Cymbopogon obtectus* (1, 13%), *Cyperaceae* indet. (13%), *Cyperus scaber* (13%), *Digitaria lanceolata* (13%), *Eragrostis interrupta* (1, 13%), *Eriachne pallidescens* var. *pallidescens* (1, 13%), *Schizachyrium fragile* (1, 13%), *Themeda triandra* (5, 13%), *Trachystylis stradbrokeensis* (5, 13%)

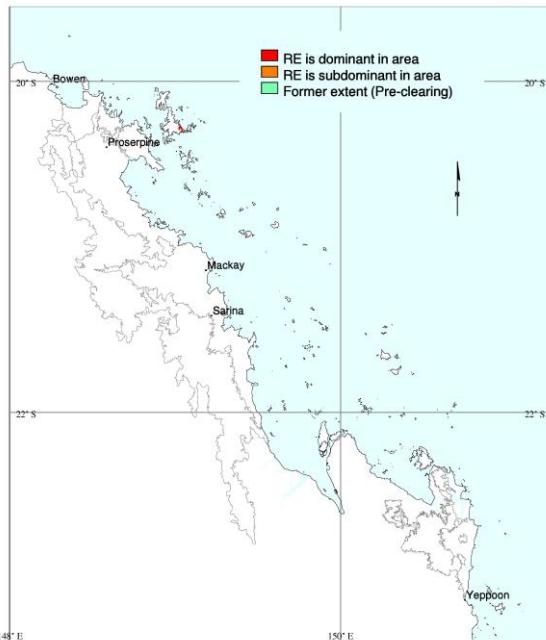
FORBS: *Dianella caerulea* (3, 50%), *Lithomyrtus obtusa* (2, 38%), *Lomandra confertifolia* (25%), *Phyllota phylloides* (25%), *Pimelea linifolia* (3, 25%), *Alphitonia excelsa* (13%), *Boronia occidentalis* (13%), *Coronidium rupicola* (13%), *Cyclophyllum coprosmoides* var. *spathulatum* (13%), *Desmodium filiforme* (13%), *Eustrephus latifolius* (13%), *Glycine tomentella* (13%), *Hibbertia linearis* var. *obtusifolia* (1, 13%), *Leptospermum polygalifolium* (13%), *Lomandra longifolia* (5, 13%), *Lomandra multiflora* subsp. *multiflora* (5, 13%), *Ochrosperma lineare* (13%), *Phyllanthus virgatus* (13%), *Pityrodia salvifolia* (1, 13%), *Portulaca bicolor* (13%), *Pseuderanthemum variabile* (13%), *Xanthorrhoea latifolia* subsp. *latifolia* (13%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Acacia crassicarpa closed-forest on Pleistocene parabolic dunes**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 391 391 100%

Species recorded: Total: 24; woody: 18; ground: 7; Avg. spp./site: 9.3; std dev.: 3.3, 3 site(s)

Basal area: Avg./site: 12.8 m<sup>2</sup>/ha, range: 3.0 - 22 m<sup>2</sup>/ha, std. deviation: 7 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Open-woodland: 50%; tall open-forest: 25%; open-forest: 25%, 4 site(s)

Representative sites: 19519, 36211, 36885, 36886.

**Stratum: T1**

Height avg. = 21.5m, range 18-26m, 4 sites

Crown cover avg. = 49.3%, range 12.0-98.0%, 4 sites

Stem density/ha avg. = 480, range 440-520, 2 sites

*Dominant species (relative cover, frequency): Acacia crassicarpa (97, 100%), Acacia flavescens (12, 25%)*

*Frequent species (cover, frequency): Acacia crassicarpa (46, 100%), Acacia flavescens (12, 25%), Eucalyptus exserta (25%)*

**Stratum: T2**

Height avg. = 12.8m, range 6.5-20m, 3 sites

Crown cover avg. = 66.3%, range 42.0-86.0%, 4 sites

Stem density/ha avg. = 1693, range 480-2320, 3 sites

*Dominant species (relative cover, frequency): Acronychia laevis (65, 75%), Acacia flavescens (36, 50%), Acacia crassicarpa (27, 100%), Pouteria pohlmaniana (14, 25%), Celtis paniculata (11, 25%)*

*Frequent species (cover, frequency): Acacia crassicarpa (18, 100%), Acronychia laevis (42, 75%), Acacia flavescens (24, 50%), Celtis paniculata (8, 25%), Jagera pseudorhus var. pseudorhus (25%), Pouteria pohlmaniana (12, 25%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.8e

### Stratum: T3

Height avg. = 6.5m, range 6-7m, 2 sites

Crown cover avg. = 30.0%, range 15.0-45.0%, 2 sites

Stem density/ha avg. = 600, 1 site

Dominant species (relative cover, frequency): *Acacia crassicarpa* (52, 50%), *Acronychia laevis* (45, 50%), *Jagera pseudorhus* var. *pseudorhus* (4, 25%), *Polyalthia nitidissima* (1, 25%)

Frequent species (cover, frequency): *Acacia crassicarpa* (19, 50%), *Acronychia laevis* (10, 50%), *Acacia flavescens* (25%), *Corymbia clarksoniana* (25%), *Jagera pseudorhus* var. *pseudorhus* (2, 25%), *Polyalthia nitidissima* (25%)

### Stratum: S1

Height avg. = 2.8m, range 2.3-3.2m, 3 sites

Crown cover avg. = 47.0%, range 3.0-100.0%, 4 sites

Stem density/ha avg. = 1507, range 280-2160, 3 sites

Dominant species (relative cover, frequency): *Acronychia laevis* (63, 75%), *Exocarpos latifolius* (59, 25%), *Acacia crassicarpa* (40, 25%), *Lithomyrtus obtusa* (24, 75%), *Acacia flavescens* (10, 50%)

Frequent species (cover, frequency): *Acronychia laevis* (28, 75%), *Lithomyrtus obtusa* (14, 75%), *Acacia flavescens* (10, 50%), *Anthobolus filifolius* (50%), *Pouteria pohlmaniana* (50%), *Acacia crassicarpa* (40, 25%), *Chionanthus ramiflora* (25%), *Duboisia myoporoides* (25%), *Eucalyptus exserta* (25%), *Exocarpos latifolius* (2, 25%), *Leucopogon leptospermoides* (25%), *Muehlenbeckia rhytidycarya* (25%), *Pandanus cookii* (25%), *Pandanus indet.* (25%), *Polyalthia nitidissima* (25%)

### Stratum: S2

Height avg. = 1.6m, range 1.5-1.8m, 3 sites

Crown cover avg. = 17.7%, range 15.0-20.0%, 3 sites

Stem density/ha avg. = 340, range 40-640, 2 sites

Dominant species (relative cover, frequency): *Muehlenbeckia rhytidycarya* (99, 25%), *Lithomyrtus obtusa* (40, 75%), *Acronychia laevis* (30, 50%), *Pandanus indet.* (11, 25%), *Leucopogon leptospermoides* (3, 50%)

Frequent species (cover, frequency): *Lithomyrtus obtusa* (7, 75%), *Acacia flavescens* (50%), *Acronychia laevis* (5, 50%), *Anthobolus filifolius* (50%), *Leucopogon leptospermoides* (1, 50%), *Acacia crassicarpa* (25%), *Duboisia myoporoides* (25%), *Muehlenbeckia rhytidycarya* (20, 25%), *Pandanus indet.* (2, 25%)

### Stratum: G

Height avg. = 0.3m, 1 site

PFC avg. = 0.0%, range 0-0%, 3 sites

Dominant species (relative cover, frequency): *Acronychia laevis* (75, 33%), *Xanthorrhoea indet.* (67, 33%), *Dianella caerulea* (17, 33%), *Trachystylis stradbrokeensis* (15, 67%), *Lomandra confertifolia* subsp. *pallida* (13, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Trachystylis stradbrokeensis* (67%)

FORBS: *Acronychia laevis* (1, 33%), *Dianella caerulea* (33%), *Lomandra confertifolia* subsp. *pallida* (33%), *Xanthorrhoea indet.* (33%)

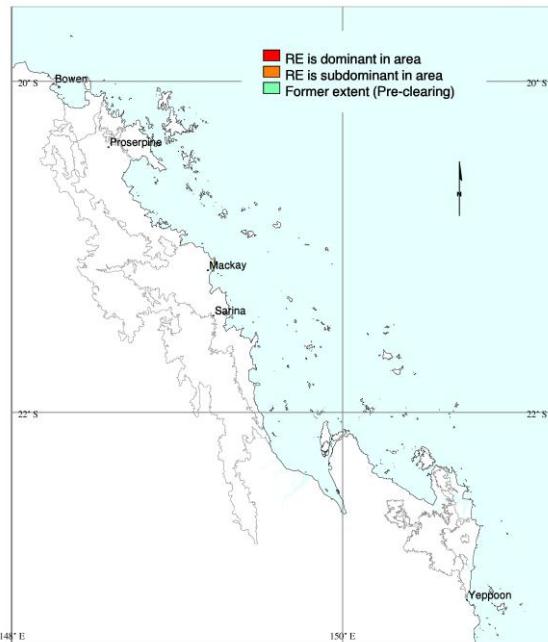
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Tussock grassland on coastal dunes**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 319      177      55%

Species recorded: Total: 76; woody: 8; ground: 70; Avg. spp./site: 28.7; std dev.: 7.1, 3 site(s)

Basal area: 0

Structural formation: Tussock grassland: 60%; closed-tussock grassland: 40%, 5 site(s)

Representative sites: 19956, 31106, 32416, 32444, 36895.

**Stratum: E**

Height avg. = 5.0m, 1 site

Crown cover avg. = 0.0%, 1 site

Stem density/ha avg. = 320, 1 site

*Frequent species (cover, frequency): Casuarina equisetifolia subsp. incana (20%), Cupaniopsis anacardioides (20%), Jasminum didymum (20%), Lantana camara\* (20%), Livistona decora (20%), Pittosporum ferrugineum (20%), Pouteria sericea (20%), Thecanthes cornucopiae (20%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.9

### Stratum: G

Height avg. = 0.2m, range 0.05-0.4m, 3 sites

PFC avg. = 72.0%, range 54-82%, 3 sites

Dominant species (relative cover, frequency): *Heteropogon triticeus* (63, 100%), *Aphyllodium biarticulatum* (7, 100%), *Eragrostis interrupta* (7, 100%), *Cassytha filiformis* (3, 100%), *Schizachyrium fragile* (3, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Aristida holathera* var. *holathera* (1, 100%), *Bulbostylis barbata* (1, 100%), *Eragrostis interrupta* (5, 100%), *Heteropogon triticeus* (46, 100%), *Melinis repens*\* (1, 100%), *Schizachyrium fragile* (2, 100%), *Cyperus scaber* (67%), *Eriachne triodiooides* (67%), *Heteropogon contortus* (2, 67%), *Cyperus javanicus* (33%), *Cyperus pedunculatus* (33%), *Digitaria didactyla*\* (2, 33%), *Elionurus citreus* (33%)

FORBS: *Aphyllodium biarticulatum* (5, 100%), *Cassytha filiformis* (3, 100%), *Emilia sonchifolia*\* (2, 100%), *Glycine tomentella* (1, 100%), *Microstachys chamaelea* (100%), *Tridax procumbens*\* (1, 100%), *Boerhavia indet.* (1, 67%), *Desmodium filliforme* (67%), *Hybanthus enneaspermus* (1, 67%), *Stylosanthes humilis*\* (67%), *Wahlenbergia gracilis* (67%), *Xerochrysum bracteatum* (67%), *Alphitonia excelsa* (33%), *Angiosperm indet.* (1, 33%), *Clerodendrum floribundum* (33%), *Commelina ensifolia* (33%), *Commelina indet.* (33%), *Conyza canadensis* var. *pusilla*\* (33%), *Crotalaria brevis* (33%), *Crotalaria montana* (33%), *Cupaniopsis anacardiooides* (33%), *Cyanthillium cinereum* (33%), *Dianella longifolia* (33%), *Evolvulus alsinoides* (33%), *Galactia tenuiflora* (33%), *Glossocardia bidens* (33%), *Indigofera hirsuta* (33%), *Mukia indet.* (33%), *Passiflora foetida*\* (33%), *Passiflora suberosa*\* (33%), *Polycarphaea corymbosa* var. *corymbosa* (33%), *Polycarphaea corymbosa* var. *minor* (33%), *Polygala linariifolia* (33%), *Portulaca pilosa*\* (33%), *Richardia brasiliensis*\* (33%), *Sarcostemma viminale* (33%), *Spermacoce brachystema* (33%), *Stachytarpheta jamaicensis*\* (33%), *Wikstroemia indica* (33%), *Xenostegia tridentata* (33%)

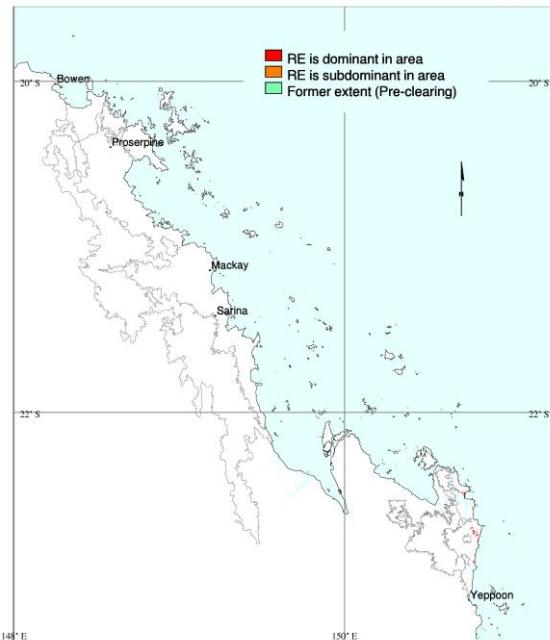
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Sand blows with bare sand and areas of sparse-herbland or shrubland**

Roger Jaensch, Wetlands International

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 394                    393                    100%

Species recorded: Total: 42; woody: 8; ground: 37; Avg. spp./site: 18.0; std dev.: 1.4, 4 site(s)

Basal area: 0

Structural formation: Sparse-forbland: 50%; open-shrubland: 25%; dwarf open-shrubland: 25%, 4 site(s)

Representative sites: 19943, 27147, 27148, 44775.

**Stratum: E**

Height avg. = 1.6m, range 1-2m, 3 sites

Crown cover avg. = 1.5%, range 1.0-2.0%, 2 sites

Stem density/ha avg. = 40, range 40-40, 2 sites

*Dominant species (relative cover, frequency): Casuarina equisetifolia subsp. incana (100, 25%), Alphitonia excelsa (100, 25%), Leptospermum neglectum (50, 25%), Allocasuarina littoralis (50, 25%)*

*Frequent species (cover, frequency): Allocasuarina littoralis (1, 25%), Alphitonia excelsa (1, 25%), Casuarina equisetifolia subsp. incana (5, 25%), Leptospermum neglectum (1, 25%)*

**Stratum: S1**

Height avg. = 0.8m, range 0.5-1m, 2 sites

Crown cover avg. = 15.0%, 1 site

Stem density/ha avg. = 1920, 1 site

*Dominant species (relative cover, frequency): Lithomyrtus obtusa (73, 50%), Allocasuarina littoralis (48, 25%), Banksia integrifolia subsp. compar (1, 25%), Allocasuarina torulosa (1, 25%), Alphitonia excelsa (1, 50%)*

*Frequent species (cover, frequency): Alphitonia excelsa (50%), Lithomyrtus obtusa (9, 50%), Allocasuarina littoralis (4, 25%), Allocasuarina torulosa (25%), Banksia integrifolia subsp. compar (25%), Hibbertia linearis (25%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.10

### Stratum: G

Height avg. = 0.2m, range 0.2-0.3m, 3 sites

PFC avg. = 5.0%, range 0-13%, 3 sites

Dominant species (relative cover, frequency): *Elionurus citreus* (34, 50%), *Crotalaria medicaginea* (25, 25%), *Podolepis arachnoidea* (16, 50%), *Euphorbia* indet. (16, 25%), *Brunonia australis* (16, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Eragrostis interrupta* (6, 75%), *Elionurus citreus* (5, 50%), *Imperata cylindrica* (50%), *Aristida holathera* var. *holathera* (25%), *Bulbostylis barbata* (16, 25%), *Cyperus enervis* (25%), *Cyperus scaber* (4, 25%), *Cyperus subulatus* (25%), *Digitaria* indet. (2, 25%), *Schizachyrium fragile* (25%)

FORBS: *Evolvulus alsinoides* (5, 75%), *Lithomyrtus obtusa* (50%), *Podolepis arachnoidea* (8, 50%), *Alphitonia excelsa* (25%), *Brunonia australis* (16, 25%), *Cassytha filiformis* (25%), *Chamaesyce* indet. (25%), *Crotalaria medicaginea* (1, 25%), *Crotalaria montana* (25%), *Cyanthillium cinereum* (25%), *Desmodium filiforme* (25%), *Dianella caerulea* (25%), *Dodonaea viscosa* (25%), *Emilia sonchifolia*\* (25%), *Euphorbia* indet. (16, 25%), *Fabaceae* indet. (25%), *Glycine tomentella* (25%), *Grevillea banksii* (25%), *Hibbertia linearis* (25%), *Ipomoea pes-caprae* (25%), *Mukia* indet. (25%), *Podolepis neglecta* (25%), *Polycarpaea corymbosa* (25%), *Polycarpaea* indet. (25%), *Scaevola calendulacea* (25%), *Sonchus oleraceus*\* (25%), *Zornia pallida* (25%)

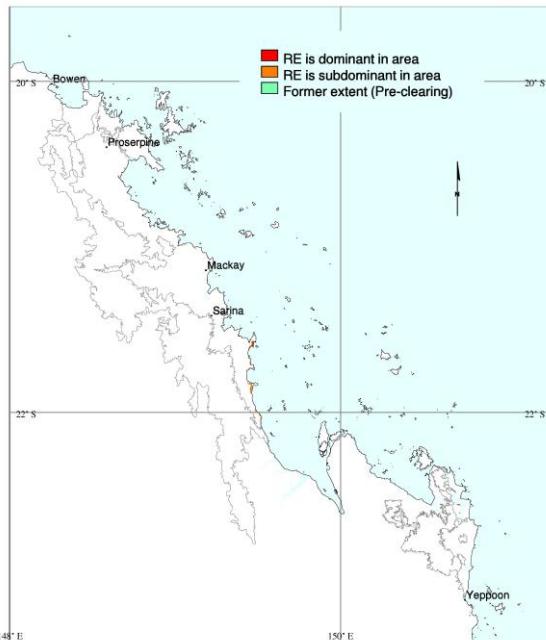
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca spp. closed-forest in parallel dune swales**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 391      339      87%

Species recorded: Total: 117; woody: 59; ground: 66; Avg. spp./site: 25.6; std dev.: 12.7, 5 site(s)

Basal area: Avg./site: 18.3 m<sup>2</sup>/ha, range: 12.0 - 23 m<sup>2</sup>/ha, std. deviation: 5 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Open-forest: 38%; woodland: 13%; closed-forest: 13%; unrecorded: 38%, 8 site(s)

Representative sites: 17513, 36045, 36048, 44195, 44232, 44446, 44790, 44854.

**Stratum: T1**

Height avg. = 13.9m, range 11-18m, 8 sites

Crown cover avg. = 70.0%, range 57.0-89.0%, 3 sites

Stem density/ha avg. = 927, range 240-2100, 3 sites

*Dominant species (relative cover, frequency): Melaleuca leucadendra (86, 75%), Melaleuca quinquenervia (51, 25%), Corymbia tessellaris (24, 25%), Livistona decora (19, 25%), Banksia integrifolia subsp. compar (10, 25%)*

*Frequent species (cover, frequency): Melaleuca leucadendra (55, 75%), Banksia integrifolia subsp. compar (3, 25%), Corymbia tessellaris (11, 25%), Glochidion sumatranum (3, 25%), Livistona decora (7, 25%), Melaleuca quinquenervia (18, 25%), Acacia disparrima subsp. disparrima (3, 13%), Acacia leiocalyx (13%), Acacia melanoxylon (8, 13%), Casuarina equisetifolia subsp. incana (13%), Dendrobium canaliculatum (13%), Elaeocarpus eumundi (13%), Glochidion lobocarpum (10, 13%), Hibiscus tiliaceus (8, 13%), Ipomoea cairica\* (8, 13%), Ipomoea pes-caprae subsp. brasiliensis (13%), Livistona indet. (13%), Melicope elleryana (3, 13%), Pandanus tectorius (3, 13%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.11

### Stratum: T2

Height avg. = 7.9m, range 6-10m, 7 sites

Crown cover avg. = 17.7%, range 6.0-32.0%, 3 sites

Stem density/ha avg. = 373, range 120-600, 3 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (78, 38%), *Planchonia careya* (24, 25%), *Alphitonia excelsa* (18, 38%)

Frequent species (cover, frequency): *Alphitonia excelsa* (3, 38%), *Melaleuca leucadendra* (14, 38%), *Planchonia careya* (2, 25%), *Acronychia indet.* (13%), *Acronychia laevis* (13%), *Acrostichum speciosum* (5, 13%), *Allocasuarina littoralis* (13%), *Archontophoenix cunninghamiana* (13%), *Banksia integrifolia* subsp. *compar* (3, 13%), *Casuarina equisetifolia* subsp. *incana* (5, 13%), *Cupaniopsis anacardiooides* (3, 13%), *Cyclophyllum coprosmoides* (3, 13%), *Dendrobium canaliculatum* (13%), *Ficus congesta* var. *congesta* (20, 13%), *Glochidion lobocarpum* (13%), *Jagera pseudorhus* var. *pseudorhus* (3, 13%), *Livistona decora* (5, 13%), *Livistona indet.* (2, 13%), *Mallotus claoxyloides* (20, 13%), *Melaleuca quinquenervia* (13%), *Melia azedarach* (13%), *Pandanus tectorius* (2, 13%), *Petalostigma triloculare* (2, 13%), *Solanum seaforthianum\** (5, 13%), *Timonius timon* var. *timon* (5, 13%)

### Stratum: T3

Height avg. = 4.0m, range 3-5m, 3 sites

Crown cover avg. = 6.5%, range 5.0-8.0%, 2 sites

Stem density/ha avg. = 420, range 120-720, 2 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (25, 25%), *Cupaniopsis anacardiooides* (8, 25%), *Diospyros geminata* (8, 25%)

Frequent species (cover, frequency): *Cupaniopsis anacardiooides* (1, 25%), *Diospyros geminata* (1, 25%), *Melaleuca leucadendra* (1, 25%), *Acacia leptocarpa* (5, 13%), *Acronychia indet.* (1, 13%), *Alphitonia excelsa* (2, 13%), *Cyclophyllum coprosmoides* (2, 13%), *Euroschinus falcatus* var. *falcatus* (13%), *Exocarpos latifolius* (1, 13%), *Glochidion ferdinandi* (1, 13%), *Microsorum punctatum* (13%), *Pouteria sericea* (13%)

### Stratum: S1

Height avg. = 2.0m, range 1-3m, 6 sites

Crown cover avg. = 11.5%, range 3.0-20.0%, 2 sites

Stem density/ha avg. = 240, range 240-240, 2 sites

Dominant species (relative cover, frequency): *Melaleuca leucadendra* (41, 25%), *Pittosporum ferrugineum* (33, 25%), *Cupaniopsis anacardiooides* (29, 50%), *Lantana camara\** (17, 25%), *Exocarpos latifolius* (16, 25%)

Frequent species (cover, frequency): *Alphitonia excelsa* (2, 50%), *Cupaniopsis anacardiooides* (5, 50%), *Exocarpos latifolius* (3, 25%), *Glochidion lobocarpum* (2, 25%), *Glochidion sumatranum* (1, 25%), *Lantana camara\** (3, 25%), *Melaleuca leucadendra* (2, 25%), *Pittosporum ferrugineum* (4, 25%), *Acacia flavescens* (10, 13%), *Acacia julifera* subsp. *curvinervia* (2, 13%), *Alyxia ruscifolia* (3, 13%), *Arytera divaricata* (13%), *Banksia robur* (13%), *Corymbia tessellaris* (13%), *Cymbidium madidum* (13%), *Dendrophthoe glabrescens* (5, 13%), *Eucalyptus robusta* (13%), *Euroschinus falcatus* (13%), *Euroschinus falcatus* var. *falcatus* (1, 13%), *Ficus obliqua* (13%), *Hibiscus diversifolius* (5, 13%), *Jagera pseudorhus* var. *pseudorhus* (13%), *Keraudrenia lanceolata* (13%), *Lithomyrtus obtusa* (13%), *Livistona indet.* (13%), *Neolitsea dealbata* (13%), *Petalostigma triloculare* (2, 13%), *Pouteria sericea* (13%)

### Stratum: S2

Height avg. = 0.7m, 1 site

Crown cover avg. = 2.0%, 1 site

Frequent species (cover, frequency): *Carissa ovata* (1, 13%), *Cupaniopsis anacardiooides* (1, 13%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.6m, range 0.2-1.3m, 5 sites

PFC avg. = 6.0%, range 0-13%, 3 sites

*Dominant species (relative cover, frequency): Lantana camara\* (40, 40%), Cyperus haspan subsp. juncoides (13, 40%), Cyperaceae indet. (13, 40%), Passiflora foetida\* (3, 40%), Passiflora suberosa\* (1, 40%)*

*Frequent species (cover, frequency): GRAMINOIDs: Cyperaceae indet. (40%), Cyperus haspan subsp. juncoides (40%), Bulbostylis barbata (5, 20%), Cyperus decompositus (5, 20%), Cyperus gracilis (2, 20%), Cyperus javanicus (20%), Cyperus leiocaulon (20%), Cyperus polystachyos (20%), Eleocharis tetraquetra (2, 20%), Eragrostis indet. (20, 20%), Fimbristylis dichotoma (20%), Gahnia aspera (20%), Gahnia sieberiana (2, 20%), Hemarthria uncinata (20, 20%), Imperata cylindrica (5, 20%), Ischaemum australe var. australis (20%), Leersia hexandra (20%), Lepironia articulata (20%), Oplismenus aemulus (19, 20%), Paspalidium gausum (5, 20%), Paspalum scrobiculatum (20%), Scleria sphacelata (19, 20%), Themeda triandra (20%) FORBS: Lantana camara\* (6, 40%), Passiflora foetida\* (3, 40%), Passiflora suberosa\* (1, 40%), Ageratum conyzoides subsp. conyzoides\* (20%), Alphitonia excelsa (20%), Blechnum orientale (19, 20%), Centella asiatica (20%), Clematicissus opaca (2, 20%), Commelina diffusa (2, 20%), Crotalaria pallida var. obovata\* (20%), Cupaniopsis anacardiooides (20%), Cyclosorus interruptus (2, 20%), Deeringia amaranthoides (20%), Dianella caerulea (20%), Diospyros geminata (20%), Emilia sonchifolia\* (5, 20%), Endiandra sieberi (20%), Eustrephus latifolius (20%), Geodorum densiflorum (5, 20%), Homalanthus nutans (2, 20%), Hoya australis (3, 20%), Ipomoea cairica\* (9, 20%), Jasminum didymum (20%), Lindsaea ensifolia subsp. ensifolia (2, 20%), Ludwigia octovalvis (20%), Lygodium microphyllum (2, 20%), Macaranga tanarius (20%), Melastoma malabathricum subsp. malabathricum (9, 20%), Microsorum punctatum (20%), Oldenlandia indet. (1, 20%), Opuntia stricta\* (20%), Philydrum lanuginosum (20%), Planchonia careya (20%), Schefflera actinophylla (2, 20%), Stachytarpheja jamaicensis\* (20%), Stephania japonica var. japonica (5, 20%), Triumfetta rhomboidea\* (1, 20%), Urena lobata\* (20%), Viola hederacea (2, 20%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

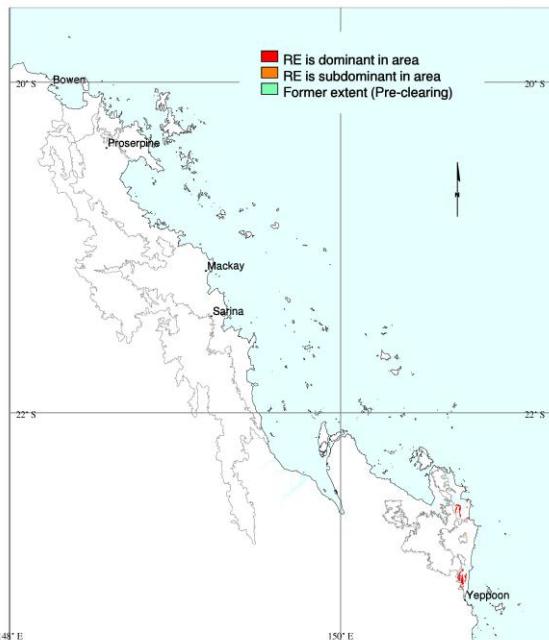
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.12a

### **Corymbia intermedia and/or Eucalyptus latisinensis and/or Allocasuarina littoralis woodland with heathy understorey on parallel dunes (subregions 4 and 5)**



Joy Bushe

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 2,071 1,894 91%

Species recorded: Total: 74; woody: 44; ground: 37; Avg. spp./site: 24.7; std dev.: 4.6, 3 site(s)

Basal area: Avg./site: 23.0 m<sup>2</sup>/ha, range: 23.0 - 23 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Woodland: 13%; low woodland: 13%; unrecorded: 75%, 8 site(s)

Representative sites: 17512, 44189, 44191, 44220, 44434, 44848, 45003, 45010.

#### Stratum: E

Height avg. = 16.0m, 1 site

Frequent species (cover, frequency): *Eucalyptus latisinensis* (2, 13%)

#### Stratum: T1

Height avg. = 12.7m, range 7-19m, 7 sites

Crown cover avg. = 40.0%, 1 site

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (34, 50%), *Eucalyptus latisinensis* (29, 50%), *Eucalyptus crebra* (28, 38%), *Corymbia intermedia* (25, 75%), *Acacia flavescens* (21, 25%)

Frequent species (cover, frequency): *Corymbia intermedia* (5, 75%), *Banksia integrifolia* subsp. *compar* (2, 63%), *Allocasuarina littoralis* (5, 50%), *Eucalyptus latisinensis* (8, 50%), *Petalostigma triloculare* (2, 50%), *Eucalyptus crebra* (4, 38%), *Acacia flavescens* (8, 25%), *Acacia julifera* subsp. *curvinervia* (3, 25%), *Corymbia clarksoniana* (3, 25%), *Corymbia tessellaris* (7, 13%), *Endiandra sieberi* (2, 13%), *Eucalyptus exserta* (3, 13%), *Eucalyptus portuensis* (4, 13%), *Leptospermum neglectum* (1, 13%), *Lophostemon suaveolens* (4, 13%), *Melaleuca quinquenervia* (10, 13%), *Petalostigma pubescens* (2, 13%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.12a

### Stratum: T2

Height avg. = 6.1m, range 3.5–10m, 5 sites

Crown cover avg. = 4.0%, 1 site

Dominant species (relative cover, frequency): *Acacia julifera* subsp. *curvinervia* (48, 25%), *Banksia integrifolia* subsp. *compar* (28, 25%), *Planchonia careya* (25, 38%), *Leptospermum neglectum* (21, 25%), *Petalostigma triloculare* (18, 38%)

Frequent species (cover, frequency): *Acacia flavescens* (5, 38%), *Allocasuarina littoralis* (4, 38%), *Petalostigma triloculare* (9, 38%), *Planchonia careya* (10, 38%), *Ricinocarpos pinifolius* (2, 38%), *Acacia julifera* subsp. *curvinervia* (18, 25%), *Banksia integrifolia* subsp. *compar* (2, 25%), *Exocarpos cupressiformis* (10, 25%), *Grevillea banksii* (5, 25%), *Leptospermum neglectum* (5, 25%), *Monotoca scoparia* (4, 25%), *Alphitonia excelsa* (5, 13%), *Corymbia intermedia* (1, 13%), *Dodonaea viscosa* (20, 13%), *Eucalyptus latisinensis* (13%), *Leptospermum polygalifolium* (20, 13%), *Melaleuca quinquenervia* (1, 13%), *Pittosporum ferrugineum* (20, 13%), *Pityrodia salviifolia* (2, 13%), *Schefflera actinophylla* (13%)

### Stratum: T3

Height avg. = 5.0m, 1 site

Frequent species (cover, frequency): *Acacia flavescens* (2, 13%), *Acacia julifera* subsp. *curvinervia* (5, 13%), *Allocasuarina littoralis* (2, 13%), *Planchonia careya* (2, 13%)

### Stratum: S1

Height avg. = 2.4m, range 1.5–5m, 6 sites

Crown cover avg. = 7.0%, 1 site

Dominant species (relative cover, frequency): *Acacia flavescens* (61, 25%), *Cupaniopsis anacardiooides* (56, 25%), *Lithomyrtus obtusa* (51, 50%), *Leucopogon leptospermoides* (35, 38%), *Leptospermum neglectum* (7, 25%)

Frequent species (cover, frequency): *Lithomyrtus obtusa* (20, 50%), *Hibbertia linearis* (2, 38%), *Leucopogon leptospermoides* (4, 38%), *Acacia flavescens* (8, 25%), *Cupaniopsis anacardiooides* (5, 25%), *Leptospermum neglectum* (5, 25%), *Pityrodia salviifolia* (5, 25%), *Acacia disparrima* subsp. *disparrima* (1, 13%), *Acacia julifera* subsp. *curvinervia* (5, 13%), *Allocasuarina littoralis* (2, 13%), *Alphitonia excelsa* (5, 13%), *Brachyloma daphnoides* (2, 13%), *Cassytha indet.* (2, 13%), *Clerodendrum inerme* (13%), *Exocarpos latifolius* (13%), *Homoranthus virgatus* (2, 13%), *Livistona decora* (13%), *Monotoca scoparia* (5, 13%), *Petalostigma triloculare* (10, 13%), *Phebalium woombye* (20, 13%), *Phyllota phylloides* (5, 13%), *Pimelea linifolia* (2, 13%), *Pittosporum ferrugineum* (13%), *Planchonia careya* (5, 13%), *Platysace linearifolia* (10, 13%), *Ricinocarpos pinifolius* (20, 13%)

### Stratum: S2

Height avg. = 1.1m, 1 site

Crown cover avg. = 15.0%, 1 site

Frequent species (cover, frequency): *Leucopogon leptospermoides* (9, 13%), *Xanthorrhoea latifolia* subsp. *latifolia* (6, 13%)

### Stratum: G

Height avg. = 0.5m, 1 site

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (21, 67%), *Passiflora suberosa*\* (21, 67%), *Xanthorrhoea latifolia* subsp. *latifolia* (19, 100%), *Trachystylis stradbrokeensis* (19, 67%), *Aristida calycina* var. *calycina* (18, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (9, 100%), *Themeda triandra* (12, 67%), *Trachystylis stradbrokeensis* (19, 67%), *Aristida calycina* var. *calycina* (18, 33%), *Caustis recurvata* (5, 33%), *Entolasia stricta* (5, 33%), *Ischaemum australe* (5, 33%), *Paspalidium indet.* (5, 33%)

FORBS: *Xanthorrhoea latifolia* subsp. *latifolia* (19, 100%), *Lithomyrtus obtusa* (21, 67%), *Lomandra* indet. (10, 67%), *Passiflora suberosa*\* (21, 67%), *Alphitonia excelsa* (5, 33%), *Boronia occidentalis* (33%), *Cassytha pubescens* (5, 33%), *Commelinia diffusa* (33%), *Dianella caerulea* (5, 33%), *Hibbertia vestita* (33%), *Pseuderanthemum variabile* (33%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

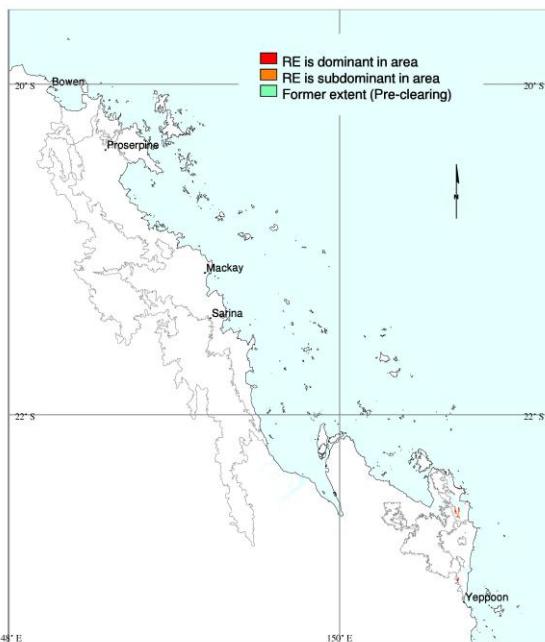
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.12b

### **Acacia julifera and/or Leptospermum neglectum and/or Ricinocarpos pinifolius and/or Acacia flavescentia open-shrubland on parallel dunes (subregions 4 and 5)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 474 474 100%

Species recorded: Total: 75; woody: 42; ground: 53; Avg. spp./site: 23.4; std dev.: 3.7, 7 site(s)

Basal area: Avg./site: 5.3 m<sup>2</sup>/ha, range: 4.5 - 6 m<sup>2</sup>/ha, std. deviation: 1 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Tall shrubland: 9%; tall open-shrubland: 9%; shrubland: 9%; unrecorded: 73%, 11 site(s)

Representative sites: 19957, 19958, 19959, 44219, 44226, 44327, 44328, 44991, 44994, 45001, 45041.

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#### Stratum: E

Height avg. = 9.0m, range 8-10m, 2 sites

Frequent species (cover, frequency): *Corymbia tessellaris* (3, 18%), *Banksia integrifolia* subsp. *compar* (9%)

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#### Stratum: T1

Height avg. = 7.2m, range 5-10m, 5 sites

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (51, 36%), *Acacia julifera* subsp. *curvinervia* (31, 36%)

Frequent species (cover, frequency): *Acacia julifera* subsp. *curvinervia* (23, 36%), *Allocasuarina littoralis* (34, 36%), *Banksia integrifolia* subsp. *compar* (6, 18%), *Leptospermum neglectum* (7, 18%), *Acacia flavescentia* (9%), *Acacia indet.* (20, 9%), *Casuarina equisetifolia* subsp. *incana* (13, 9%), *Corymbia clarksoniana* (5, 9%), *Corymbia intermedia* (9%), *Eucalyptus exserta* (5, 9%), *Leptospermum polygalifolium* (5, 9%), *Melaleuca dealbata* (9%), *Pandanus tectorius* (9%), *Petalostigma pubescens* (20, 9%), *Planchonia careya* (13, 9%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.12b

### Stratum: T2

Height avg. = 7.5m, 1 site

Frequent species (cover, frequency): *Acacia julifera* subsp. *curvinervia* (5, 9%), *Alphitonia excelsa* (9%), *Baeckea frutescens* (5, 9%), *Dodonaea viscosa* (5, 9%), *Jacksonia scoparia* (9%), *Phebalium woombye* (20, 9%), *Planchonia careya* (5, 9%)

### Stratum: S1

Height avg. = 2.5m, range 0.6-4.5m, 9 sites

Crown cover avg. = 29.3%, range 13.0-39.0%, 3 sites

Stem density/ha avg. = 940, range 560-1320, 2 sites

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (47, 27%), *Leptospermum neglectum* (40, 36%), *Allocasuarina littoralis* (37, 27%), *Ricinocarpos pinifolius* (24, 27%), *Acacia flavescens* (22, 45%)

Frequent species (cover, frequency): *Acacia flavescens* (19, 45%), *Leptospermum neglectum* (11, 36%), *Leucopogon leptospermoides* (10, 36%), *Pityrodia salviifolia* (9, 36%), *Allocasuarina littoralis* (13, 27%), *Grevillea banksii* (5, 27%), *Lithomyrtus obtusa* (8, 27%), *Ricinocarpos pinifolius* (11, 27%), *Acacia julifera* subsp. *julifera* (3, 18%), *Exocarpus cupressiformis* (3, 18%), *Jacksonia scoparia* (2, 18%), *Phyllota phylloides* (1, 18%), *Zieria laxiflora* (18%), *Banksia integrifolia* subsp. *compar* (3, 9%), *Brachyloma daphnoides* (5, 9%), *Breynia oblongifolia* (9%), *Cassytha glabella* (9%), *Corymbia intermedia* (9%), *Cupaniopsis anacardioides* (9%), *Hibbertia indet.* (1, 9%), *Hibbertia linearis* (5, 9%), *Homoranthus virgatus* (9%), *Jagera pseudorhus* var. *pseudorhus* (9%), *Monotoca scoparia* (20, 9%), *Pandanus tectorius* (9%), *Petalostigma pubescens* (9%), *Petalostigma triloculare* (20, 9%), *Pimelea linifolia* (5, 9%), *Platysace linearifolia* (3, 9%)

### Stratum: S2

Height avg. = 1.5m, 1 site

Frequent species (cover, frequency): *Allocasuarina littoralis* (2, 9%), *Alphitonia excelsa* (5, 9%), *Lithomyrtus obtusa* (10, 9%), *Petalostigma triloculare* (5, 9%), *Phebalium woombye* (5, 9%), *Pityrodia salviifolia* (2, 9%), *Ricinocarpos pinifolius* (9%)

### Stratum: G

Height avg. = 0.5m, range 0.2-0.7m, 6 sites

PFC avg. = 40.0%, range 23-74%, 3 sites

Dominant species (relative cover, frequency): *Caustis recurvata* (33, 57%), *Lithomyrtus obtusa* (18, 86%), *Leucopogon leptospermoides* (18, 43%), *Platysace linearifolia* (16, 57%), *Macarthuria neocambrica* (10, 29%)

Frequent species (cover, frequency): GRAMINOIDs: *Trachystylos stradbrokeensis* (7, 71%), *Caustis recurvata* (15, 57%), *Eriachne insularis* (3, 43%), *Schoenus ornithopodiooides* (2, 43%), *Eriachne pallescens* (3, 29%), *Imperata cylindrica* (3, 29%), *Schoenus calostachyus* (5, 29%), Cyperaceae indet. (14%), *Cyperus* indet. (14%), *Cyperus leiocaulon* (14%), *Entolasia stricta* (5, 14%), *Eriachne* indet. (5, 14%), *Panicum simile* (17, 14%), *Paspalidium gausum* (5, 14%), *Themeda triandra* (4, 14%)

FORBS: *Lithomyrtus obtusa* (7, 86%), *Boronia occidentalis* (1, 57%), *Platysace linearifolia* (6, 57%), *Acacia julifera* subsp. *julifera* (1, 43%), *Leucopogon leptospermoides* (5, 43%), *Phebalium woombye* (43%), *Phyllota phylloides* (43%), *Pityrodia salviifolia* (3, 43%), *Ricinocarpos pinifolius* (2, 43%), *Tricoryne elatior* (1, 43%), *Zieria laxiflora* (43%), *Dianella caerulea* (2, 29%), *Hibbertia* indet. (1, 29%), *Hibbertia linearis* (29%), *Homoranthus virgatus* (29%), *Leptospermum neglectum* (29%), *Lomandra* indet. (2, 29%), *Macarthuria neocambrica* (4, 29%), *Pimelea linifolia* (3, 29%), *Acacia flavescens* (5, 14%), *Allocasuarina littoralis* (14%), *Alphitonia excelsa* (14%), *Aotus lanigera* (14%), *Brachyloma daphnoides* (14%), *Breynia oblongifolia* (14%), *Cassytha glabella* (14%), *Cassytha pubescens* (14%), *Commelinia diffusa* (4, 14%), *Evolvulus alsinoides* (4, 14%), *Hibbertia vestita* (5, 14%), *Ipomoea pes-caprae* subsp. *brasiliensis* (14%), *Passiflora suberosa*\* (14%), *Persoonia virgata* (14%), *Podolepis longipedata* (14%), *Pomax umbellata* (2, 14%), *Pseudanthus orientalis* (14%), *Xanthorrhoea latifolia* subsp. *latifolia* (5, 14%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

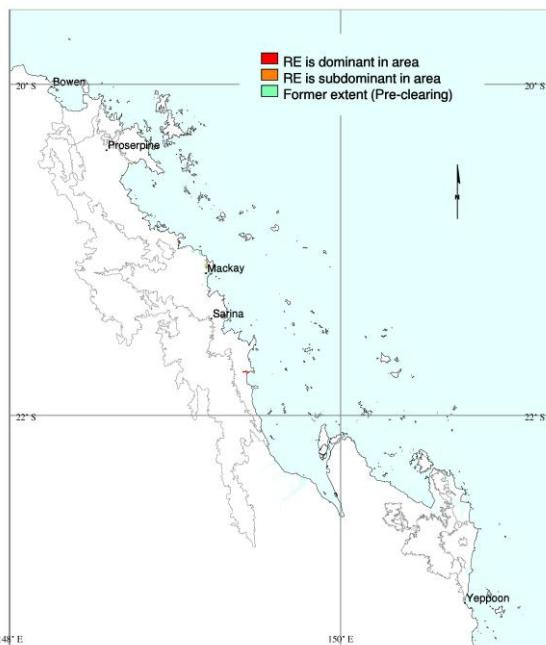
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13a

**Corymbia tessellaris, Melaleuca spp., C. intermedia, Eucalyptus tereticornis +/- Livistona decora +/- Acacia spp. open-forest on coastal dune sands mixed with alluvium and marine sediments (subregion 2)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,891 430 23%

Species recorded: Total: 75; woody: 47; ground: 33; Avg. spp./site: 45.0; std dev.: 11.0, 2 site(s)

Basal area: Avg./site: 28.0 m<sup>2</sup>/ha, range: 26.0 - 30 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Open-forest: 50%; closed-forest: 50%, 2 site(s)

Representative sites: 31286, 36208.

### Stratum: E

Height avg. = 21.0m, 1 site

Crown cover avg. = 17.0%, 1 site

Stem density/ha avg. = 120, 1 site

Dominant species (relative cover, frequency): *Corymbia tessellaris* (99, 50%), *Corymbia clarksoniana* (1, 50%)

Frequent species (cover, frequency): *Corymbia clarksoniana* (50%), *Corymbia tessellaris* (17, 50%)

### Stratum: T1

Height avg. = 21.5m, range 18-25m, 2 sites

Crown cover avg. = 88.0%, range 82.0-94.0%, 2 sites

Stem density/ha avg. = 853, range 467-1240, 2 sites

Dominant species (relative cover, frequency): *Acacia disperrima* subsp. *disperrima* (86, 50%), *Melaleuca leucadendra* (58, 50%), *Corymbia intermedia* (39, 50%), *Melaleuca quinquenervia* (14, 50%), *Corymbia tessellaris* (3, 50%)

Frequent species (cover, frequency): *Acacia disperrima* subsp. *disperrima* (71, 50%), *Corymbia intermedia* (36, 50%), *Corymbia tessellaris* (3, 50%), *Hymenosporum flavum* (50%), *Melaleuca leucadendra* (55, 50%), *Melaleuca quinquenervia* (11, 50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13a

### Stratum: T2

Height avg. = 12.5m, range 9-16m, 2 sites

Crown cover avg. = 90.5%, range 90.0-91.0%, 2 sites

Stem density/ha avg. = 613, range 467-760, 2 sites

Dominant species (relative cover, frequency): *Chionanthus ramiflora* (83, 50%), *Acacia disparrima* subsp. *disparrima* (54, 50%), *Tabernaemontana orientalis* (10, 50%), *Melaleuca quinquenervia* (10, 50%), *Pandanus* indet. (9, 100%)

Frequent species (cover, frequency): *Pandanus* indet. (9, 100%), *Acacia disparrima* subsp. *disparrima* (52, 50%), *Chionanthus ramiflora* (71, 50%), *Dendrobium canaliculatum* (50%), *Dendrobium* indet. (50%), *Glochidion lobocarpum* (50%), *Hymenosporum flavum* (4, 50%), *Jagera pseudorhus* var. *pseudorhus* (8, 50%), *Livistona decora* (5, 50%), *Melaleuca leucadendra* (50%), *Melaleuca quinquenervia* (9, 50%), *Millettia pinnata* (3, 50%), *Polyalthia nitidissima* (50%), *Polyscias elegans* (50%), *Tabernaemontana orientalis* (10, 50%)

### Stratum: T3

Height avg. = 5.0m, range 4-6m, 2 sites

Crown cover avg. = 20.0%, range 15.0-25.0%, 2 sites

Stem density/ha avg. = 707, range 533-880, 2 sites

Dominant species (relative cover, frequency): *Millettia pinnata* (81, 50%), *Chionanthus ramiflora* (28, 50%), *Acronychia laevis* (23, 50%), *Pandanus* indet. (19, 50%), *Jagera pseudorhus* var. *pseudorhus* (12, 50%)

Frequent species (cover, frequency): *Acacia disparrima* subsp. *disparrima* (50%), *Acanthus ilicifolius* (50%), *Acronychia laevis* (6, 50%), *Alstonia scholaris* (50%), *Bursaria tenuifolia* (50%), *Centrosema molle\** (50%), *Chionanthus ramiflora* (7, 50%), *Corymbia clarksoniana* (50%), *Corymbia tessellaris* (50%), *Diospyros geminata* (2, 50%), *Drypetes deplanchei* (50%), *Glochidion lobocarpum* (50%), *Hymenosporum flavum* (1, 50%), *Jagera pseudorhus* var. *pseudorhus* (3, 50%), *Larsenaikia jardinei* (50%), *Lepiderema punctulata* (50%), *Livistona decora* (3, 50%), *Mallotus philippensis* (50%), *Melaleuca quinquenervia* (50%), *Millettia pinnata* (14, 50%), *Pandanus* indet. (5, 50%), *Pittosporum ferrugineum* (50%), *Polyscias elegans* (50%), *Pouteria chartacea* (50%), *Smilax australis* (50%), *Tabernaemontana orientalis* (50%)

### Stratum: S1

Height avg. = 1.6m, range 1.5-1.7m, 2 sites

Crown cover avg. = 22.0%, range 17.0-27.0%, 2 sites

Stem density/ha avg. = 1207, range 880-1533, 2 sites

Dominant species (relative cover, frequency): *Millettia pinnata* (36, 50%), *Chionanthus ramiflora* (27, 50%), *Tabernaemontana orientalis* (18, 50%), *Livistona decora* (16, 50%), *Lantana camara\** (11, 50%)

Frequent species (cover, frequency): *Diospyros geminata* (100%), *Glochidion lobocarpum* (2, 100%), *Planchonia careya* (100%), *Sclopia braunii* (2, 100%), *Acacia disparrima* subsp. *disparrima* (1, 50%), *Acronychia laevis* (50%), *Alphitonia excelsa* (50%), *Alstonia scholaris* (50%), *Atractocarpus fitzalanii* (3, 50%), *Brucea javanica* (50%), *Centrosema molle\** (50%), *Chionanthus ramiflora* (5, 50%), *Clerodendrum longiflorum* (50%), *Corymbia clarksoniana* (50%), *Corymbia tessellaris* (2, 50%), *Cupaniopsis anacardiooides* (50%), *Diospyros compacta* (50%), *Drypetes deplanchei* (50%), *Ficus opposita* (50%), *Lantana camara\** (3, 50%), *Lepiderema punctulata* (1, 50%), *Livistona decora* (3, 50%), *Mallotus philippensis* (50%), *Millettia pinnata* (10, 50%), *Pandanus* indet. (1, 50%), *Pittosporum ferrugineum* (50%), *Planchonella* indet. (50%), *Polyscias elegans* (50%), *Schefflera actinophylla* (50%), *Smilax australis* (1, 50%), *Stephania japonica* (50%), *Tabernaemontana orientalis* (5, 50%), *Triumfetta rhomboidea\** (2, 50%)

### Stratum: S2

Height avg. = 0.7m, 1 site

Crown cover avg. = 18.0%, 1 site

Stem density/ha avg. = 240, 1 site

Dominant species (relative cover, frequency): *Tabernaemontana orientalis* (28, 50%), *Millettia pinnata* (28, 50%), *Pandanus* indet. (17, 50%), *Sauvagesia albiflorus* (11, 50%), *Lantana camara\** (6, 50%)

Frequent species (cover, frequency): *Cupaniopsis anacardiooides* (1, 50%), *Glochidion lobocarpum* (1, 50%), *Lantana camara\** (1, 50%), *Millettia pinnata* (5, 50%), *Pandanus* indet. (3, 50%), *Pogonolobus reticulatus* (50%), *Sauvagesia albiflorus* (2, 50%), *Tabernaemontana orientalis* (5, 50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13a

### Stratum: G

Height avg. = 0.3m, 1 site

PFC avg. = 13.5%, range 6-21%, 2 sites

Dominant species (relative cover, frequency): *Chionanthus ramiflora* (48, 50%), *Livistona decora* (19, 50%), *Passiflora suberosa*\* (19, 100%), *Exocarpos latifolius* (9, 50%), *Corymbia intermedia* (9, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperus javanicus* (50%), *Digitaria parviflora* (1, 50%), *Fimbristylis dichotoma* (50%), *Gahnia aspera* (50%), *Imperata cylindrica* (50%), *Oplismenus burmannii* (50%), *Oplismenus compositus* (50%), *Oplismenus* indet. (50%), *Paspalidium distans* (50%), *Phragmites australis* (50%), *Scleria brownii* (50%)

FORBS: *Eustrephus latifolius* (100%), *Passiflora suberosa*\* (1, 100%), *Abrus precatorius* (1, 50%), *Acrostichum speciosum* (50%), *Ageratum conyzoides* subsp. *conyzoides*\* (50%), *Aristolochia pubera* (50%), *Asclepiadaceae* indet. (1, 50%), *Chionanthus ramiflora* (10, 50%), *Commelina ensifolia* (50%), *Corymbia intermedia* (2, 50%), *Cyanthillium cinereum* (50%), *Dianella caerulea* (50%), *Emilia sonchifolia*\* (50%), *Exocarpos latifolius* (2, 50%), *Flemingia parviflora* (50%), *Jagera pseudorhus* var. *pseudorhus* (50%), *Livistona decora* (4, 50%), *Lomandra longifolia* (50%), *Memecylon pauciflorum* (2, 50%), *Stachytarpheta jamaicensis*\* (50%), *Stephania japonica* (50%), *Tylophora benthamii* (50%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

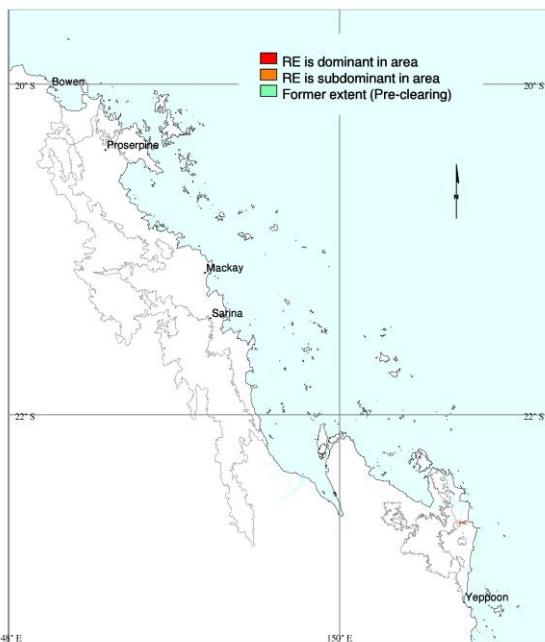
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13b

### **Melaleuca quinquenervia and/or Lophostemon suaveolens +/- Livistona decora open-forest on coastal dune sands mixed with alluvium and/or marine sediments (subregions 4 and 5)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 155 151 97%

Species recorded: Total: 131; woody: 61; ground: 84; Avg. spp./site: 39.4; std dev.: 8.6, 5 site(s)

Basal area: Avg./site: 24.0 m<sup>2</sup>/ha, range: 14.0 - 34 m<sup>2</sup>/ha, std. deviation: 8 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Open-forest: 36%; woodland: 9%; unrecorded: 55%, 11 site(s)

Representative sites: 19930, 19931, 40898, 40901, 44557, 44558, 44560, 44602, 44604, 44609, 44834.

#### Stratum: T1

Height avg. = 18.3m, range 8-30m, 11 sites

Crown cover avg. = 55.3%, range 39.0-66.0%, 4 sites

Stem density/ha avg. = 286, range 63-680, 4 sites

Dominant species (relative cover, frequency): *Eucalyptus portuensis* (41, 27%), *Melaleuca quinquenervia* (38, 73%), *Lophostemon suaveolens* (36, 73%), *Corymbia intermedia* (29, 27%), *Corymbia tessellaris* (17, 27%)

Frequent species (cover, frequency): *Lophostemon suaveolens* (18, 73%), *Melaleuca quinquenervia* (20, 73%), *Eucalyptus tereticornis* (7, 64%), *Livistona decora* (3, 45%), *Corymbia intermedia* (13, 27%), *Corymbia tessellaris* (7, 27%), *Eucalyptus portuensis* (23, 27%), *Allocasuarina torulosa* (8, 9%), *Banksia integrifolia* subsp. *compar* (16, 9%), *Commersonia bartramia* (3, 9%), *Corymbia clarksoniana* (9%), *Endiandra sieberi* (3, 9%), *Eucalyptus crebra* (4, 9%), *Eucalyptus platyphylla* (5, 9%), *Ficus indet.* (3, 9%), *Glochidion sumatranum* (3, 9%), *Melaleuca dealbata* (9%), *Melaleuca viridiiflora* var. *viridiiflora* (4, 9%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13b

### Stratum: T2

Height avg. = 10.8m, range 6-19m, 10 sites

Crown cover avg. = 47.5%, range 25.0-58.0%, 4 sites

Stem density/ha avg. = 573, range 320-1100, 4 sites

Dominant species (relative cover, frequency): *Melicope elleryana* (46, 27%), *Livistona decora* (35, 73%), *Allocasuarina torulosa* (33, 27%), *Banksia integrifolia* subsp. *compar* (26, 36%), *Melaleuca quinquenervia* (24, 27%)

Frequent species (cover, frequency): *Livistona decora* (11, 73%), *Banksia integrifolia* subsp. *compar* (3, 36%), *Allocasuarina torulosa* (5, 27%), *Lophostemon suaveolens* (4, 27%), *Melaleuca quinquenervia* (5, 27%), *Melicope elleryana* (4, 27%), *Acacia leptocarpa* (9, 18%), *Allocasuarina littoralis* (7, 18%), *Alphitonia excelsa* (5, 18%), *Endiandra sieberi* (5, 18%), *Planchonia careya* (12, 18%), *Acacia flavescens* (16, 9%), *Acacia julifera* subsp. *curvinervia* (20, 9%), *Acacia sparsiflora* (12, 9%), *Banksia integrifolia* (2, 9%), *Corymbia clarksoniana* (9%), *Eucalyptus platyphylla* (9%), *Eucalyptus portuensis* (9%), *Euroschinus falcatus* (10, 9%), *Glochidion ferdinandi* (2, 9%), *Glochidion sumatranum* (2, 9%), *Litsea fawcettiana* (10, 9%), *Lophostemon confertus* (6, 9%), *Petalostigma pubescens* (9%), *Petalostigma triloculare* (6, 9%), *Timonius timon* var. *timon* (5, 9%)

### Stratum: T3

Height avg. = 5.3m, range 3.5-9m, 7 sites

Crown cover avg. = 44.3%, range 10.0-64.0%, 3 sites

Stem density/ha avg. = 1840, range 400-3720, 3 sites

Dominant species (relative cover, frequency): *Livistona decora* (28, 45%), *Acacia leptocarpa* (26, 36%), *Planchonia careya* (18, 36%), *Lantana camara*\* (6, 27%), *Timonius timon* var. *timon* (6, 27%)

Frequent species (cover, frequency): *Livistona decora* (9, 45%), *Acacia leptocarpa* (6, 36%), *Planchonia careya* (8, 36%), *Lantana camara*\* (3, 27%), *Lophostemon suaveolens* (27%), *Timonius timon* var. *timon* (2, 27%), *Acacia disparrima* subsp. *disparrima* (1, 18%), *Allocasuarina littoralis* (4, 18%), *Allocasuarina torulosa* (15, 18%), *Alphitonia excelsa* (5, 18%), *Banksia integrifolia* subsp. *compar* (1, 18%), *Endiandra sieberi* (18%), *Euroschinus falcatus* (18%), *Glochidion sumatranum* (6, 18%), *Melicope elleryana* (15, 18%), *Pittosporum ferrugineum* (2, 18%), *Acacia disparrima* (9%), *Acacia flavescens* (9%), *Acronychia laevis* (2, 9%), *Blechnum indicum* (5, 9%), *Cassytha filiformis* (9%), *Chionanthus ramiflora* (9%), *Cordyline manners-suttoniae* (9%), *Cordyline murchisoniae* (9%), *Corymbia clarksoniana* (9%), *Corymbia intermedia* (9%), *Cupaniopsis anacardiooides* (9%), *Diospyros compacta* (9%), *Eucalyptus platyphylla* (9%), *Eucalyptus portuensis* (9%), *Ficus congesta* (9%), *Ficus congesta* var. *congesta* (20, 9%), *Ficus opposita* (9%), *Litsea fawcettiana* (2, 9%), *Macaranga involucrata* var. *mallotoides* (9%), *Macaranga tanarius* (9%), *Melaleuca dealbata* (9%), *Melaleuca quinquenervia* (9%), *Micromelum minutum* (9%), *Petalostigma triloculare* (9%), *Scolopia braunii* (9%), *Trema tomentosa* var. *aspera* (2, 9%)

### Stratum: S1

Height avg. = 2.1m, range 1.5-3m, 6 sites

Crown cover avg. = 8.5%, range 1.0-16.0%, 2 sites

Stem density/ha avg. = 2970, range 1640-4300, 2 sites

Dominant species (relative cover, frequency): *Lithomyrtus obtusa* (54, 27%), *Lantana camara*\* (35, 27%), *Acacia flavescens* (13, 27%), *Alphitonia excelsa* (10, 27%), *Planchonia careya* (10, 36%)

Frequent species (cover, frequency): *Planchonia careya* (2, 36%), *Acacia flavescens* (2, 27%), *Alphitonia excelsa* (2, 27%), *Lantana camara*\* (6, 27%), *Lithomyrtus obtusa* (7, 27%), *Endiandra sieberi* (3, 18%), *Eucalyptus portuensis* (18%), *Glochidion sumatranum* (4, 18%), *Livistona decora* (5, 18%), *Acacia disparrima* (9%), *Acacia julifera* subsp. *curvinervia* (10, 9%), *Acacia leptocarpa* (2, 9%), *Acacia sparsiflora* (9%), *Banksia integrifolia* (9%), *Banksia integrifolia* subsp. *compar* (5, 9%), *Cupaniopsis anacardiooides* (5, 9%), *Eucalyptus tereticornis* (9%), *Euroschinus falcatus* (9%), *Ficus congesta* (2, 9%), *Ficus indet.* (2, 9%), *Ficus opposita* (9%), *Ficus virens* (9%), *Glochidion indet.* (9%), *Homalanthus indet.* (9%), *Litsea fawcettiana* (9%), *Lophostemon confertus* (9%), *Lygodium microphyllum* (5, 9%), *Macaranga tanarius* (9%), *Melastoma malabathricum* subsp. *malabathricum* (5, 9%), *Melicope elleryana* (9%), *Petalostigma pubescens* (9%), *Timonius timon* var. *timon* (2, 9%), *Triumfetta rhomboidea*\* (9%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.13b

### Stratum: G

Height avg. = 7.8m, range 0.3-30m, 4 sites

PFC avg. = 42.5%, range 31-67%, 4 sites

Dominant species (relative cover, frequency): *Ottochloa nodosa* (43, 60%), *Passiflora suberosa\** (15, 100%), *Alloteropsis semialata* (9, 40%), *Digitaria parviflora* (7, 40%), *Imperata cylindrica* (5, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (4, 100%), *Oplismenus aemulus* (2, 60%), *Ottochloa nodosa* (20, 60%), *Alloteropsis semialata* (4, 40%), *Arundinella nepalensis* (1, 40%), *Cymbopogon refractus* (40%), *Digitaria lanceolata* (1, 40%), *Digitaria parviflora* (3, 40%), *Eremochloa bimaculata* (40%), *Paspalidium gausum* (40%), *Scleria mackaviensis* (1, 40%), *Abildgaardia vaginata* (2, 20%), *Aristida calycina* var. *calycina* (17, 20%), *Cyperus indet.* (1, 20%), *Digitaria ciliaris\** (20%), *Digitaria diffusa* (20%), *Digitaria minima* (3, 20%), *Eragrostis brownii* (20%), *Eriachne pallescens* var. *pallescens* (1, 20%), *Eriachne trisetoides* (20%), *Paspalidium aversum* (20%), *Paspalidium distans* (4, 20%), *Paspalidium indet.* (1, 20%), *Paspalum scrobiculatum* (1, 20%), *Phragmites australis* (17, 20%), *Rhynchospora corymbosa* (17, 20%), *Setaria surgens* (20%), *Themeda triandra* (2, 20%)

FORBS: *Lomandra longifolia* (3, 100%), *Passiflora suberosa\** (7, 100%), *Dianella caerulea* (5, 80%), *Pseuderanthemum variabile* (80%), *Emilia sonchifolia\** (60%), *Eustrephus latifolius* (60%), *Flemingia parviflora* (1, 60%), *Pteridium esculentum* (2, 60%), *Stephania japonica* (60%), *Cassytha filiformis* (40%), *Geitonoplesium cymosum* (1, 40%), *Livistona decora* (1, 40%), *Planchonia careya* (40%), *Triumfetta indet.* (1, 40%), *Acacia flavescens* (1, 20%), *Adiantum hispidulum* (20%), *Ajuga australis* (7, 20%), *Alphitonia excelsa* (3, 20%), *Aristolochia thozetii* (20%), *Blechnum indicum* (4, 20%), *Cassytha pubescens* (20%), *Cheilanthes nitida* (20%), *Commelina diffusa* (20%), *Corymbia intermedia* (20%), *Cyanthillium cinereum* (20%), *Desmodium gunnii* (20%), *Glochidion sumatranum* (20%), *Glycine tomentella* (20%), *Jasminum didymum* subsp. *didymum* (20%), *Lantana camara\** (1, 20%), *Lithomyrtus obtusa* (20%), *Lomandra multiflora* subsp. *multiflora* (4, 20%), *Melicope elleryana* (1, 20%), *Opuntia stricta\** (20%), *Oxalis rubens* (20%), *Petalostigma triloculare* (20%), *Rostellularia adscendens* (20%), *Triumfetta rhomboidea\** (20%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

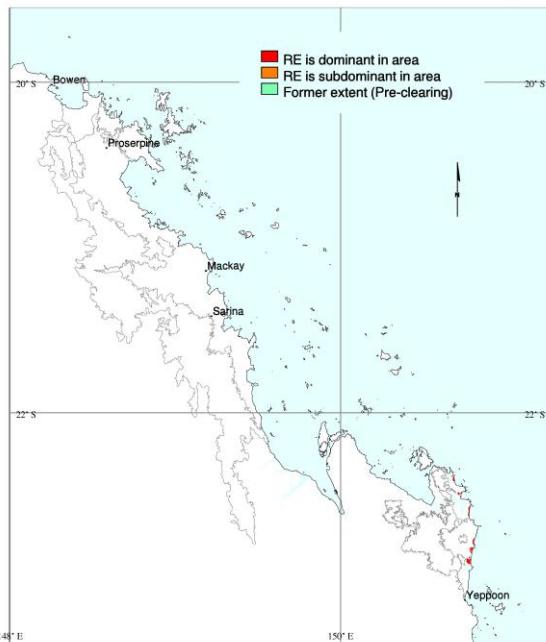
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.14a

### Banksia integrifolia, rainforest spp. +/- Allocasuarina littoralis shrubland, on Holocene parabolic dunes (subregion 5)



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,179 1,179 100%

Species recorded: Total: 127; woody: 74; ground: 81; Avg. spp./site: 38.2; std dev.: 8.1, 9 site(s)

Basal area: Avg./site: 9.9 m<sup>2</sup>/ha, range: 3.0 - 26 m<sup>2</sup>/ha, std. deviation: 9 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Tall shrubland: 11%; shrubland: 11%; open-scrub: 11%; open-forest: 11%; unrecorded: 56%, 9 site(s)

Representative sites: 19936, 19950, 19963, 40768, 44973, 44975, 44996, 44998, 45014.

#### Stratum: E

Frequent species (cover, frequency): *Corymbia tessellaris* (20, 11%)

#### Stratum: T1

Height avg. = 9.0m, range 6-12m, 2 sites

Crown cover avg. = 65.0%, 1 site

Stem density/ha avg. = 1067, 1 site

Dominant species (relative cover, frequency): *Livistona decora* (29, 33%), *Cupaniopsis anacardiooides* (24, 33%), *Corymbia tessellaris* (22, 22%), *Alphitonia excelsa* (11, 22%), *Exocarpos latifolius* (8, 33%)

Frequent species (cover, frequency): *Cryptocarya triplinervis* (3, 33%), *Cupaniopsis anacardiooides* (18, 33%), *Exocarpos latifolius* (6, 33%), *Livistona decora* (16, 33%), *Planchonia careya* (2, 33%), *Acronychia laevis* (22%), *Alphitonia excelsa* (9, 22%), *Corymbia tessellaris* (16, 22%), *Micromelum minutum* (3, 22%), *Acacia flavescens* (11, 11%), *Acacia julifera* subsp. *curvinervia* (11%), *Acacia leptocarpa* (13, 11%), *Allocasuarina littoralis* (11%), *Banksia integrifolia* (25, 11%), *Cassytha pubescens* (11, 11%), *Diospyros geminata* (11%), *Dodonaea viscosa* (5, 11%), *Drypetes deplanchei* (11%), *Glochidion sumatranum* (3, 11%), *Grevillea banksii* (3, 11%), *Hibiscus tiliaceus* (5, 11%), *Jasminum didymum* subsp. *racemosum* (22, 11%), *Jasminum simplicifolium* subsp. *australiense* (22, 11%), *Leptospermum neglectum* (11%), *Lophostemon suaveolens* (11%), *Melaleuca leucadendra* (20, 11%), *Melaleuca quinquenervia* (11%), *Melaleuca viridiflora* var. *viridiflora* (20, 11%), *Melicope elleryana* (3, 11%), *Pandanus tectorius* (11%), *Petalostigma pubescens* (11, 11%), *Petalostigma triloculare* (13, 11%), *Pittosporum ferrugineum* (11%), *Pouteria sericea* (20, 11%), *Sarcostemma viminale* subsp. *brunonianum* (11%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.14a

### Stratum: T2

Height avg. = 5.0m, 1 site

Crown cover avg. = 54.0%, 1 site

Stem density/ha avg. = 1067, 1 site

Dominant species (relative cover, frequency): *Cupaniopsis anacardiooides* (43, 33%), *Alphitonia excelsa* (37, 33%), *Petalostigma pubescens* (28, 22%), *Acacia flavescens* (17, 22%), *Trophis scandens* subsp. *scandens* (6, 22%)

Frequent species (cover, frequency): *Alectryon connatus* (3, 33%), *Alphitonia excelsa* (5, 33%), *Cupaniopsis anacardiooides* (15, 33%), *Acacia flavescens* (13, 22%), *Acronychia laevis* (3, 22%), *Banksia integrifolia* subsp. *compar* (3, 22%), *Jagera pseudorhus* var. *pseudorhus* (5, 22%), *Livistona decora* (22%), *Petalostigma pubescens* (5, 22%), *Trophis scandens* subsp. *scandens* (5, 22%), *Acacia indet.* (20, 11%), *Acacia leptocarpa* (5, 11%), *Allocasuarina littoralis* (5, 11%), *Banksia integrifolia* (1, 11%), *Banksia robur* (5, 11%), *Cassia brewsteri* (11%), *Corymbia tessellaris* (11%), *Cyclophyllum coprosmoides* (5, 11%), *Drypetes deplanchei* (5, 11%), *Euroschinus falcatus* (11%), *Exocarpos latifolius* (11%), *Ficus congesta* var. *congesta* (11%), *Ficus opposita* (11%), *Lantana camara*\* (5, 11%), *Microsorum punctatum* (5, 11%), *Pittosporum ferrugineum* (5, 11%), *Pityrodia salviifolia* (11%), *Planchonia careya* (5, 11%), *Pouteria sericea* (11%), *Sterculia quadrifida* (5, 11%)

### Stratum: S1

Height avg. = 2.5m, range 1-5m, 5 sites

Crown cover avg. = 39.0%, range 8.0-69.0%, 4 sites

Stem density/ha avg. = 3750, range 2000-5800, 4 sites

Dominant species (relative cover, frequency): *Petalostigma pubescens* (27, 22%), *Jasminum simplicifolium* subsp. *australiense* (26, 22%), *Cupaniopsis anacardiooides* (24, 44%), *Lithomyrtus obtusa* (20, 67%), *Cyclophyllum coprosmoides* (17, 22%)

Frequent species (cover, frequency): *Lantana camara*\* (4, 67%), *Lithomyrtus obtusa* (5, 67%), *Diospyros geminata* (1, 56%), *Cupaniopsis anacardiooides* (10, 44%), *Exocarpos latifolius* (3, 44%), *Grevillea banksii* (3, 44%), *Jagera pseudorhus* var. *pseudorhus* (2, 44%), *Pouteria sericea* (1, 44%), *Acronychia laevis* (1, 33%), *Allocasuarina littoralis* (2, 33%), *Banksia integrifolia* subsp. *compar* (9, 33%), *Dodonaea viscosa* (8, 33%), *Drypetes deplanchei* (1, 33%), *Jasminum didymum* (1, 33%), *Jasminum simplicifolium* (6, 33%), *Livistona decora* (1, 33%), *Opuntia stricta*\* (33%), *Passiflora suberosa*\* (7, 33%), *Petalostigma triloculare* (33%), *Pittosporum ferrugineum* (33%), *Planchonia careya* (33%), *Alectryon connatus* (1, 22%), *Alphitonia excelsa* (22%), *Alyxia spicata* (22%), *Cassytha filiformis* (1, 22%), *Cyclophyllum coprosmoides* (2, 22%), *Dendrophthoe glabrescens* (22%), *Ficus opposita* (3, 22%), *Jasminum simplicifolium* subsp. *australiense* (13, 22%), *Melaleuca leucadendra* (5, 22%), *Petalostigma pubescens* (4, 22%), *Polyalthia nitidissima* (1, 22%), *Psychotria poliostemma* (3, 22%), *Acacia disparrima* subsp. *disparrima* (11%), *Acacia flavescens* (11%), *Acacia julifera* subsp. *curvinervia* (11%), *Acacia leptocarpa* (11%), *Alectryon coriaceus* (11%), *Banksia integrifolia* (11%), *Casuarina equisetifolia* subsp. *incana* (1, 11%), *Clerodendrum floribundum* (11%), *Dodonaea viscosa* subsp. *viscosa* (5, 11%), *Einadia hastata* (11%), *Glochidion sumatranum* (11%), *Hibbertia scandens* (11%), *Jagera pseudorhus* (11%), *Jasminum didymum* subsp. *didymum* (5, 11%), *Myrsine indet.* (11%), *Pandanus tectorius* (2, 11%), *Persoonia virgata* (11%), *Sarcostemma viminale* (1, 11%), *Sterculia quadrifida* (11%), *Viscum articulatum* (11%), *Wikstroemia indica* (11%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.3m, range 0.2-0.3m, 4 sites

PFC avg. = 15.3%, range 6-25%, 4 sites

*Dominant species (relative cover, frequency): Jasminum didymum subsp. didymum (29, 22%), Eragrostis interrupta (21, 33%), Imperata cylindrica (17, 67%), Passiflora suberosa\* (14, 78%), Dianella caerulea (13, 78%)*

*Frequent species (cover, frequency): GRAMINOIDs: Cyperus enervis (5, 78%), Imperata cylindrica (3, 67%), Paspalidium gausum (2, 67%), Aristida calycina var. calycina (4, 33%), Cymbopogon refractus (2, 33%), Eragrostis interrupta (3, 33%), Setaria surgens (2, 33%), Aristida indet. (22%), Cyperus scaber (22%), Digitaria lanceolata (22%), Ottochloa nodosa (8, 22%), Zoysia macrantha subsp. macrantha (1, 22%), Aristida holathera var. holathera (2, 11%), Cyperus decompositus (11%), Cyperus indet. (11%), Cyperus subulatus (11%), Digitaria ammophila (11%), Digitaria orbata (1, 11%), Isolepis indet. (11%), Poaceae indet. (11%), Schizachyrium fragile (11%), Setaria pumila\* (3, 11%), Themeda triandra (11%), Zoysia macrantha (11%)*

*FORBS: Dianella caerulea (3, 78%), Passiflora suberosa\* (6, 78%), Hibbertia scandens (2, 56%), Opuntia stricta\* (44%), Stephania japonica (5, 44%), Breynia oblongifolia (33%), Conyzza indet. (2, 33%), Exocarpos latifolius (33%), Gnaphalium indet. (2, 33%), Ipomoea pes-caprae (33%), Jasminum didymum (1, 33%), Lithomyrtus obtusa (3, 33%), Alphitonia excelsa (22%), Cassytha filiformis (22%), Clerodendrum floribundum (22%), Cupaniopsis anacardioides (1, 22%), Dianella indet. (22%), Einadia hastata (22%), Emilia sonchifolia\* (22%), Glycine tomentella (22%), Grevillea banksii (22%), Jasminum didymum subsp. didymum (10, 22%), Jasminum simplicifolium (22%), Lomandra longifolia (5, 22%), Phyllanthus virgatus (22%), Pittosporum ferrugineum (22%), Achyranthes aspera (11%), Banksia integrifolia subsp. compar (11%), Blechnum indicum (3, 11%), Carpobrotus glaucescens (11%), Crotalaria brevis (11%), Cryptocarya indet. (11%), Cyclophyllum coprosmoides (21, 11%), Dodonaea viscosa (11%), Dodonaea viscosa subsp. viscosa (11%), Eustrephus latifolius (11%), Ficus opposita (11%), Hibbertia linearis (11%), Ipomoea cairica\* (11%), Ipomoea pes-caprae subsp. brasiliensis (11%), Jagera pseudorhus var. pseudorhus (11%), Jasminum simplicifolium subsp. australiense (3, 11%), Livistona decora (11%), Lomandra hystrix (11%), Lomandra multiflora (11%), Macaranga involucrata (11%), Malvastrum americanum\* (11%), Pandanus tectorius (11%), Passiflora foetida\* (11%), Petalostigma triloculare (11%), Pimelea linifolia (11%), Pouteria sericea (6, 11%), Pseuderanthemum variabile (11%), Pteridium esculentum (3, 11%), Sarcostemma viminale (1, 11%), Sarcostemma viminale subsp. brunonianum (11%), Triumfetta rhomboidea\* (11%)*

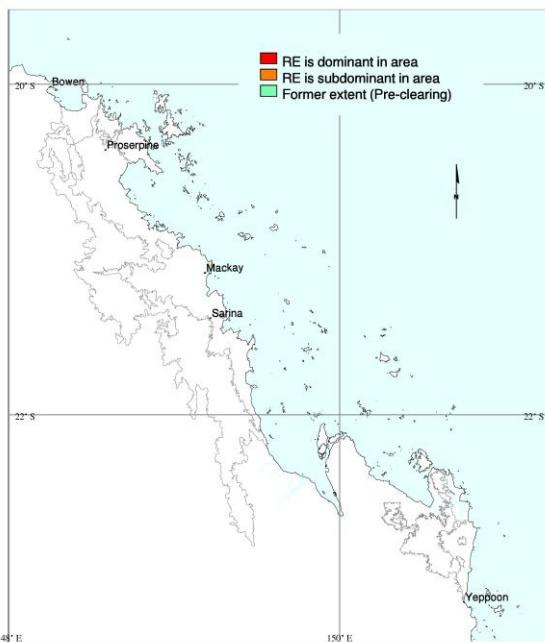
Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Corymbia tessellaris, Banksia integrifolia low open-forest on Holocene parabolic dunes  
(subregion 2)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 88                    32                    36%

Species recorded: Total: 67; woody: 35; ground: 43; Avg. spp./site: 43.5; std dev.: 6.5, 2 site(s)

Basal area: Avg./site: 12.0 m<sup>2</sup>/ha, range: 7.5 - 17 m<sup>2</sup>/ha, std. deviation: 5 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Low open-forest: 100%, 2 site(s)

Representative sites: 19510, 31105.

### Stratum: T1

Height avg. = 6.0m, 1 site

Crown cover avg. = 68.0%, range 58.0-78.0%, 2 sites

Stem density/ha avg. = 780, range 600-960, 2 sites

Dominant species (relative cover, frequency): *Corymbia tessellaris* (76, 100%), *Jagera pseudorhus* var. *pseudorhus* (16, 50%), *Banksia integrifolia* subsp. *compar* (15, 100%)

Frequent species (cover, frequency): *Banksia integrifolia* subsp. *compar* (11, 100%), *Corymbia tessellaris* (53, 100%), *Amyema* indet. (50%), *Cupaniopsis anacardioides* (50%), *Euroschinus falcatus* (50%), *Jagera pseudorhus* var. *pseudorhus* (10, 50%), *Maytenus disperma* (50%), *Terminalia muelleri* (50%)

### Stratum: T2

Height avg. = 4.0m, 1 site

Crown cover avg. = 70.0%, 1 site

Stem density/ha avg. = 667, 1 site

Dominant species (relative cover, frequency): *Banksia integrifolia* subsp. *compar* (33, 50%), *Corymbia tessellaris* (26, 50%), *Jagera pseudorhus* var. *pseudorhus* (24, 50%), *Acacia leptocarpa* (9, 50%), *Alphitonia excelsa* (7, 50%)

Frequent species (cover, frequency): *Acacia leptocarpa* (6, 50%), *Alphitonia excelsa* (5, 50%), *Banksia integrifolia* subsp. *compar* (24, 50%), *Corymbia tessellaris* (19, 50%), *Jagera pseudorhus* var. *pseudorhus* (17, 50%), *Mallotus philippensis* (50%), *Planchonia careya* (50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.2.14b

### Stratum: T3

Height avg. = 2.0m, 1 site

Crown cover avg. = 33.0%, 1 site

Stem density/ha avg. = 2733, 1 site

Dominant species (relative cover, frequency): *Planchonia careya* (29, 50%), *Jagera pseudorhus* var. *pseudorhus* (26, 50%), *Alphitonia excelsa* (19, 50%), *Maytenus disperma* (10, 50%), *Ficus opposita* (7, 50%)

Frequent species (cover, frequency): *Abrus precatorius* subsp. *precatorius* (50%), *Acacia leptocarpa* (50%), *Alphitonia excelsa* (6, 50%), *Banksia integrifolia* subsp. *compar* (50%), *Corymbia tessellaris* (50%), *Cupaniopsis anacardioides* (50%), *Exocarpos cupressiformis* (50%), *Ficus opposita* (2, 50%), *Glochidion lobocarpum* (50%), *Jagera pseudorhus* var. *pseudorhus* (9, 50%), *Lantana camara*\* (2, 50%), *Macaranga tanarius* (50%), *Maytenus disperma* (4, 50%), *Melaleuca viridiiflora* var. *viridiiflora* (50%), *Pittosporum ferrugineum* (50%), *Planchonia careya* (10, 50%), *Pouteria sericea* (50%)

### Stratum: S1

Height avg. = 1.0m, 1 site

Crown cover avg. = 26.0%, range 13.0-39.0%, 2 sites

Stem density/ha avg. = 1447, range 1360-1533, 2 sites

Dominant species (relative cover, frequency): *Xanthorrhoea johnsonii* (43, 50%), *Pouteria sericea* (20, 50%), *Alphitonia excelsa* (17, 100%), *Banksia integrifolia* subsp. *compar* (13, 100%), *Exocarpos cupressiformis* (10, 50%)

Frequent species (cover, frequency): *Alphitonia excelsa* (3, 100%), *Banksia integrifolia* subsp. *compar* (4, 100%), *Clerodendrum floribundum* (1, 100%), *Corymbia tessellaris* (3, 100%), *Cupaniopsis anacardioides* (2, 100%), *Glochidion lobocarpum* (100%), *Maytenus disperma* (100%), *Abrus precatorius* (1, 50%), *Acacia leptocarpa* (50%), *Acronychia laevis* (2, 50%), *Cassytha filiformis* (50%), *Chionanthus ramiflora* (50%), *Clerodendrum longiflorum* var. *glabrum* (50%), *Diospyros geminata* (50%), *Euroschinus falcatus* (50%), *Exocarpos cupressiformis* (4, 50%), *Geodorum densiflorum* (50%), *Jagera pseudorhus* var. *pseudorhus* (50%), *Jasminum didymum* (2, 50%), *Lantana camara*\* (2, 50%), *Livistona decora* (50%), *Macaranga tanarius* (1, 50%), *Passiflora suberosa*\* (50%), *Pittosporum ferrugineum* (2, 50%), *Planchonia careya* (50%), *Pouteria sericea* (8, 50%), *Stephania japonica* (50%), *Terminalia muelleri* (50%), *Wikstroemia indica* (50%), *Xanthorrhoea johnsonii* (6, 50%)

### Stratum: G

Height avg. = 0.3m, 1 site

PFC avg. = 13.0%, range 10-16%, 2 sites

Dominant species (relative cover, frequency): *Imperata cylindrica* (43, 50%), *Heteropogon triticeus* (34, 50%), *Chrysopogon fallax* (19, 50%), *Abrus precatorius* (14, 50%), *Jagera pseudorhus* var. *pseudorhus* (13, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Aristida holathera* var. *holathera* (50%), *Bulbostylis barbata* (50%), *Chrysopogon fallax* (2, 50%), *Cyperus eglobosus* (50%), *Cyperus javanicus* (50%), *Cyperus scaber* (50%), *Eragrostis interrupta* (50%), *Heteropogon contortus* (50%), *Heteropogon triticeus* (5, 50%), *Imperata cylindrica* (5, 50%), *Paspalidium distans* (50%), *Poaceae* indet. (50%), *Schizachyrium fragile* (50%), *Urochloa subquadripala*\* (1, 50%)

FORBS: *Aphyllodium biarticulatum* (100%), *Dianella longifolia* (100%), *Jasminum didymum* (1, 100%), *Passiflora suberosa*\* (100%), *Abrus precatorius* (2, 50%), *Alphitonia excelsa* (1, 50%), *Aster subulatus*\* (50%), *Banksia integrifolia* subsp. *compar* (50%), *Cassytha filiformis* (50%), *Commelina ensifolia* (50%), *Corymbia tessellaris* (1, 50%), *Crotalaria mitchellii* subsp. *mitchellii* (50%), *Crotalaria montana* (50%), *Crotalaria pallida* (50%), *Cyanthillium cinereum* (50%), *Dendrobium discolor* (50%), *Desmodium filiforme* (50%), *Emilia sonchifolia*\* (50%), *Exocarpos cupressiformis* (50%), *Geitonoplesium cymosum* (50%), *Glycine tomentella* (1, 50%), *Hybanthus enneaspermus* (50%), *Jagera pseudorhus* var. *pseudorhus* (1, 50%), *Livistona decora* (50%), *Lomandra longifolia* (1, 50%), *Polycarphaea corymbosa* var. *corymbosa* (50%), *Sarcostemma viminale* (50%), *Urena lobata*\* (50%), *Wikstroemia indica* (50%)

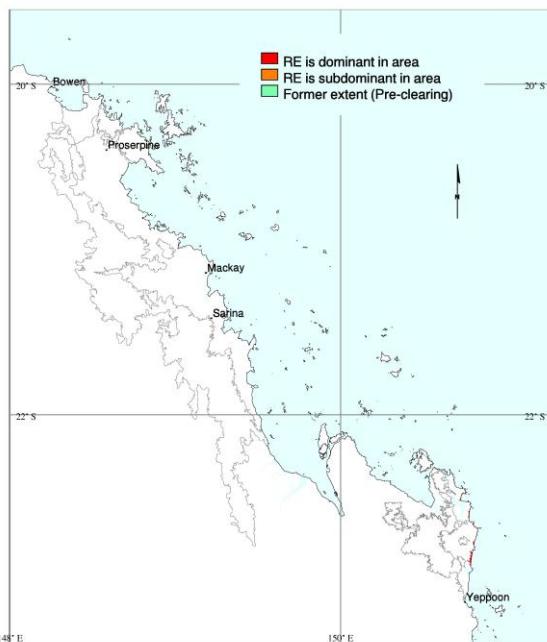
Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Acacia disparrima +/- Leptospermum neglectum +/- Casuarina equisetifolia low open-forest, on Holocene parabolic dunes (subregion 5)**



Joy Brushland

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 745 745 100%

Species recorded: Total: 53; woody: 31; ground: 28; Avg. spp./site: 31.5; std dev.: 8.5, 2 site(s)

Basal area: Avg./site: 10.0 m<sup>2</sup>/ha, range: 10.0 - 10 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Open-scrub: 50%; unrecorded: 50%, 2 site(s)

Representative sites: 19935, 45012.

**Stratum: E**

Dominant species (relative cover, frequency): *Pandanus tectorius* (100, 50%)

Frequent species (cover, frequency): *Pandanus tectorius* (5, 50%)

**Stratum: S1**

Height avg. = 2.0m, 1 site

Crown cover avg. = 100.0%, 1 site

Stem density/ha avg. = 7160, 1 site

Dominant species (relative cover, frequency): *Acacia disparrima* subsp. *disparrima* (43, 100%), *Petalostigma pubescens* (20, 50%), *Brachyloma daphnoides* (10, 50%), *Lithomyrtus obtusa* (7, 100%), *Allocasuarina littoralis* (6, 100%)

Frequent species (cover, frequency): *Acacia disparrima* subsp. *disparrima* (44, 100%), *Allocasuarina littoralis* (6, 100%), *Alphitonia excelsa* (1, 100%), *Banksia integrifolia* subsp. *compar* (5, 100%), *Grevillea banksii* (2, 100%), *Lithomyrtus obtusa* (7, 100%), *Phyllota phylloides* (5, 100%), *Pouteria sericea* (6, 100%), *Acacia flavescentia* (50%), *Acronychia laevis* (50%), *Brachyloma daphnoides* (10, 50%), *Cassytha filiformis* (50%), *Cassytha pubescens* (3, 50%), *Cupaniopsis anacardioides* (50%), *Cyclophyllum coprosmoides* (50%), *Cyclophyllum coprosmoides* var. *spathulatum* (1, 50%), *Diospyros geminata* (50%), *Dodonaea viscosa* (3, 50%), *Exocarpos cupressiformis* (2, 50%), *Exocarpos latifolius* (50%), *Hibbertia linearis* (3, 50%), *Jasminum didymum* (50%), *Opuntia stricta*\* (50%), *Passiflora suberosa*\* (50%), *Petalostigma pubescens* (20, 50%), *Petalostigma triloculare* (50%), *Phyllanthus virgatus* (3, 50%), *Pimelea linifolia* (3, 50%), *Pittosporum ferrugineum* (50%), *Pityrodia salvifolia* (1, 50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.3m, 1 site

PFC avg. = 6.0%, 1 site

Dominant species (relative cover, frequency): *Banksia integrifolia* subsp. *compar* (29, 50%), *Cyclophyllum coprosmoides* var. *spathulatum* (23, 50%), *Xanthorrhoea latifolia* subsp. *latifolia* (22, 50%), *Lithomyrtus obtusa* (20, 50%), *Paspalidium gausum* (14, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Aristida* indet. (5, 50%), *Elionurus citreus* (50%), *Eragrostis interrupta* (5, 50%), *Eriachne insularis* (50%), *Imperata cylindrica* (50%), *Panicum effusum* (50%), *Paspalidium gausum* (1, 50%), *Themeda triandra* (5, 50%)

FORBS: *Dianella caerulea* (3, 100%), *Alphitonia excelsa* (50%), *Banksia integrifolia* subsp. *compar* (2, 50%), *Brunonia australis* (5, 50%), *Crotalaria montana* (5, 50%), *Cyclophyllum coprosmoides* var. *spathulatum* (2, 50%), *Desmodium* indet. (5, 50%), *Emilia sonchifolia*\* (5, 50%), *Evolvulus alsinoides* (5, 50%), *Hibbertia stricta* (5, 50%), *Isotropis filicaulis* (5, 50%), *Jasminum didymum* (50%), *Lithomyrtus obtusa* (1, 50%), *Passiflora suberosa*\* (50%), *Podolepis longipedata* (5, 50%), *Portulaca* indet. (50%), *Tephrosia filipes* (5, 50%), *Tricoryne elatior* (50%), *Xanthorrhoea latifolia* subsp. *latifolia* (20, 50%), *Zornia dyctiocarpa* (5, 50%)

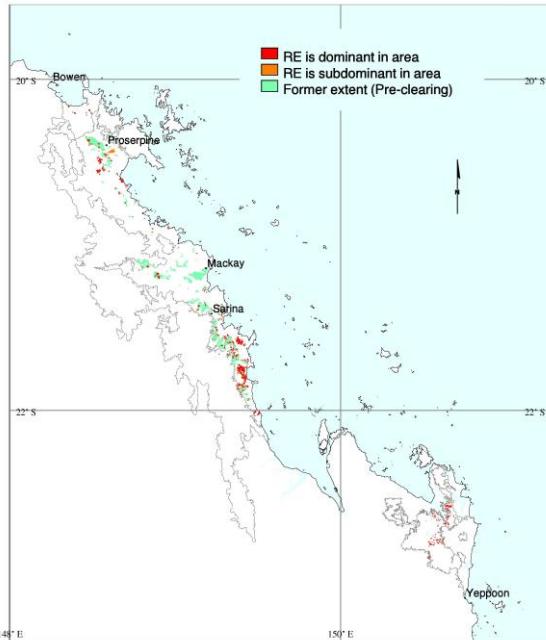
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

**Melaleuca viridiflora woodland on seasonally inundated alluvial plains with impeded drainage**

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 45,036 7,758 17%

Species recorded: Total: 192; woody: 32; ground: 165; Avg. spp./site: 52.2; std dev.: 10.6, 5 site(s)

Basal area: Avg./site: 19.2 m<sup>2</sup>/ha, range: 5.0 - 26 m<sup>2</sup>/ha, std. deviation: 7 m<sup>2</sup>/ha, 6 site(s)

Structural formation: Woodland: 33%; open-forest: 11%; low woodland: 11%; low open-forest: 11%; unrecorded: 33%, 9 site(s)

Representative sites: 19452, 36187, 36624, 36984, 40764, 40921, 44280, 44320, 44566.

**Stratum: E**

Height avg. = 12.2m, range 7.5-18m, 3 sites

Crown cover avg. = 3.0%, 1 site

Stem density/ha avg. = 20, 1 site

*Dominant species (relative cover, frequency): Eucalyptus exserta (86, 22%), Corymbia intermedia (39, 22%)*

*Frequent species (cover, frequency): Corymbia intermedia (2, 22%), Eucalyptus exserta (4, 22%), Lophostemon suaveolens (2, 11%)*

**Stratum: T1**

Height avg. = 9.8m, range 5-17m, 9 sites

Crown cover avg. = 49.5%, range 20.0-72.0%, 6 sites

Stem density/ha avg. = 550, range 160-1240, 5 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. viridiflora (90, 78%), Eucalyptus platyphylla (32, 22%), Corymbia clarksoniana (19, 33%), Corymbia intermedia (10, 22%), Eucalyptus exserta (3, 22%)*

*Frequent species (cover, frequency): Melaleuca viridiflora var. viridiflora (44, 78%), Corymbia clarksoniana (8, 33%), Lophostemon suaveolens (1, 33%), Corymbia intermedia (5, 22%), Eucalyptus exserta (1, 22%), Eucalyptus platyphylla (10, 22%), Acacia leiocalyx (11%), Corymbia dallachiana (11%), Dendrobium canaliculatum (11%), Eucalyptus latisinensis (3, 11%), Eucalyptus tereticornis (1, 11%), Melaleuca viridiflora (72, 11%), Pandanus indet. (2, 11%), Syncarpia glomulifera (3, 11%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

## Technical Description

## Regional ecosystem: 8.3.2

### Stratum: T2

Height avg. = 5.7m, range 1.7-9m, 5 sites

Crown cover avg. = 23.0%, range 1.0-50.0%, 5 sites

Stem density/ha avg. = 680, range 20-1680, 4 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. viridiflora (92, 56%), Corymbia clarksoniana (8, 22%), Dendrobium canaliculatum (2, 22%), Acacia leptocarpa (2, 33%)*

*Frequent species (cover, frequency): Melaleuca viridiflora var. viridiflora (28, 56%), Acacia leptocarpa (33%), Corymbia clarksoniana (3, 22%), Dendrobium canaliculatum (22%), Acacia implexa (1, 11%), Allocasuarina torulosa (2, 11%), Corymbia dallachiana (11%), Corymbia tessellaris (11%), Dendrophthoe glabrescens (11%), Eucalyptus platyphylla (11%), Grevillea banksii (2, 11%)*

### Stratum: T3

Height avg. = 4.0m, 1 site

Crown cover avg. = 0.0%, 1 site

Stem density/ha avg. = 160, 1 site

*Frequent species (cover, frequency): Acacia leptocarpa (11%), Melaleuca viridiflora var. viridiflora (11%)*

### Stratum: S1

Height avg. = 1.6m, range 1-2.5m, 8 sites

Crown cover avg. = 5.0%, range 1.0-12.0%, 5 sites

Stem density/ha avg. = 698, range 40-1520, 4 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. viridiflora (55, 67%), Acacia leptocarpa (36, 44%), Planchonia careya (32, 22%), Timonius timon var. timon (17, 22%), Acacia leiocalyx (10, 22%)*

*Frequent species (cover, frequency): Melaleuca viridiflora var. viridiflora (7, 67%), Acacia leptocarpa (2, 44%), Grevillea banksii (1, 33%), Lophostemon suaveolens (1, 33%), Acacia leiocalyx (2, 22%), Pittosporum ferrugineum (22%), Planchonia careya (1, 22%), Timonius timon (22%), Timonius timon var. timon (1, 22%), Acacia crassa (11%), Acacia implexa (11%), Allocasuarina littoralis (2, 11%), Allocasuarina torulosa (5, 11%), Corymbia intermedia (11%), Eucalyptus platyphylla (11%), Eucalyptus tereticornis (11%), Ficus opposita (11%), Glochidion indet. (11%), Lantana camara\* (4, 11%), Livistona decora (11%), Lophostemon confertus (2, 11%), Ludwigia octovalvis (11%)*

### Stratum: S2

Height avg. = 1.5m, 1 site

Crown cover avg. = 1.0%, 1 site

Stem density/ha avg. = 40, 1 site

*Frequent species (cover, frequency): Acacia leptocarpa (11%), Melaleuca viridiflora var. viridiflora (1, 11%)*

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

## Technical Description

## Regional ecosystem: 8.3.2

### Stratum: G

Height avg. = 0.6m, range 0.3-0.8m, 5 sites

PFC avg. = 77.2%, range 50-95%, 5 sites

Dominant species (relative cover, frequency): *Ischaemum fragile* (40, 40%), *Ischaemum australe* (27, 40%), *Themeda triandra* (16, 100%), *Ischaemum australe* var. *villosum* (16, 60%), *Eremochloa bimaculata* (12, 100%)

Frequent species (cover, frequency): GRAMINOIDES: *Eremochloa bimaculata* (9, 100%), *Themeda triandra* (12, 100%), *Fimbristylis dichotoma* (5, 80%), *Paspalidium distans* (80%), *Abildgaardia ovata* (60%), *Capillipedium spicigerum* (1, 60%), *Chrysopogon fallax* (4, 60%), *Cyperus haspan* subsp. *juncoides* (60%), *Fuirena ciliaris* (60%), *Imperata cylindrica* (4, 60%), *Ischaemum australe* var. *villosum* (16, 60%), *Paspalum scrobiculatum* (3, 60%), *Sacciolepis indica* (1, 60%), *Scleria brownii* (1, 60%), *Cyperus polystachyos* (40%), *Digitaria violascens*\* (40%), *Eragrostis brownii* (1, 40%), *Fimbristylis polytrichoides* (1, 40%), *Heteropogon triticeus* (2, 40%), *Ischaemum australe* (14, 40%), *Ischaemum fragile* (38, 40%), *Arundinella nepalensis* (20%), *Baumea* indet. (20%), *Bothriochloa bladhii* (2, 20%), *Cyperus aquatilis* (20%), *Cyperus difformis* (20%), *Cyperus haspan* (20%), *Cyperus sanguinolentus* (20%), *Digitaria* indet. (20%), *Digitaria longiflora* (20%), *Eleocharis philippinensis* (20%), *Eleocharis setifolia* (20%), *Eragrostis* indet. (20%), *Eragrostis spartinae* (20%), *Eulalia trispicata* (20%), *Fimbristylis aestivalis* (20%), *Fimbristylis cinnamometorum* (9, 20%), *Fimbristylis depauperata* (20%), *Fimbristylis tristachya* (15, 20%), *Fuirena umbellata* (20%), *Hyparrhenia rufa*\* (20%), *Juncus polyanthemus* (20%), *Leersia hexandra* (20%), *Lepironia articulata* (2, 20%), *Mnesithea rotboellioides* (20%), *Panicum simile* (20%), *Paspalidium* indet. (20%), *Paspalum dilatatum*\* (20%), *Paspalum paniculatum*\* (20%), *Poaceae* indet. (20%), *Rhynchospora heterochaeta* (20%), *Rhynchospora leae* (20%), *Schizachyrium pseudeulalia* (20%), *Scleria caricina* (20%), *Scleria polycarpa* (20%), *Scleria rugosa* (4, 20%), *Scleria tricuspidata* (20%), *Sorghum nitidum* forma *aristatum* (20%), *Sporobolus fertilis*\* (20%), *Sporobolus* indet. (20%), *Sporobolus virginicus* (20%)

FORBS: *Phyllanthus virgatus* (80%), *Acmella grandiflora* var. *brachyglossa* (60%), *Ageratum conyzoides* (60%), *Crotalaria montana* (60%), *Emilia sonchifolia*\* (60%), *Lindernia crustacea* (60%), *Murdannia graminea* (60%), *Stachytarpheta jamaicensis*\* (1, 60%), *Stylosanthes scabra*\* (60%), *Thecanthes cornucopiae* (60%), *Urena lobata*\* (60%), *Blumea saxatilis* (40%), *Brunoniella acaulis* (40%), *Brunoniella australis* (40%), *Centella asiatica* (40%), *Chamaecrista mimosoides* (40%), *Crinum* indet. (40%), *Desmodium heterocarpon* var. *strigosum* (40%), *Desmodium trichostachyum* (40%), *Dianella longifolia* (40%), *Flemingia parviflora* (40%), *Gonocarpus chinensis* subsp. *verrucosus* (40%), *Hygrophila angustifolia* (40%), *Logandra longifolia* (2, 40%), *Passiflora foetida*\* (40%), *Sida rhombifolia*\* (40%), *Spermacoce* indet. (40%), *Triumfetta rhomboidea*\* (40%), *Acacia leptocarpa* (20%), *Aeschynomene villosa*\* (20%), *Alphitonia excelsa* (20%), *Alysicarpus bupleurifolius*\* (20%), *Alysicarpus vaginalis*\* (20%), *Asteraceae* indet. (20%), *Bacopa floribunda* (20%), *Bidens pilosa*\* (20%), *Cassytha filiformis* (20%), *Cassytha* indet. (20%), *Commelinaceae* (20%), *Conyza bonariensis*\* (20%), *Conyza* indet. (4, 20%), *Crinum angustifolium* (20%), *Crotalaria lanceolata* (20%), *Cyanthillium cinereum* (20%), *Cyclocarpa stellaris*\* (20%), *Desmodium filiforme* (20%), *Desmodium triflorum*\* (20%), *Dianella rara* (2, 20%), *Drosera indica* (20%), *Eclipta prostrata* (20%), *Emilia sonchifolia* var. *sonchifolia*\* (20%), *Eustrephus latifolius* (20%), *Glycine tomentella* (20%), *Goodenia* indet. (20%), *Goodenia pilosa* (20%), *Haloragis heterophylla* (3, 20%), *Lindernia* indet. (20%), *Lindsaea ensifolia* (20%), *Lobelia quadrangularis* (20%), *Ludwigia octovalvis* (20%), *Macroptilium lathyroides*\* (20%), *Mimosa pudica*\* (20%), *Mitrasacme prolifera* (20%), *Murdannia gigantea* (1, 20%), *Nymphaea violacea* (20%), *Nymphoides* indet. (20%), *Oldenlandia galiooides* (20%), *Oldenlandia subulata* (20%), *Philydrum lanuginosum* (20%), *Phyllanthus novae-hollandiae* (20%), *Phyllanthus simplex* (1, 20%), *Platostoma longicorne* (20%), *Pterocaulon redolens* (20%), *Pycnospora lutescens* (20%), *Rostellularia adscendens* (20%), *Rotala tripartita* (20%), *Spermacoce brachystema* (1, 20%), *Stackhousia intermedia* (20%), *Tephrosia juncea* (20%), *Tricoryne elatior* (20%), *Uraria lagopodioides* (20%), *Vigna vexillata* (20%), *Vigna vexillata* var. *youngiana* (20%), *Xanthorrhoea* indet. (20%), *Xanthorrhoea johnsonii* (20%)

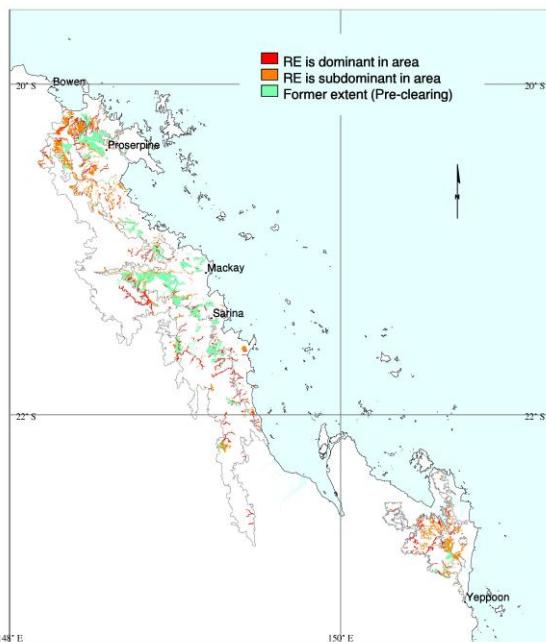
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca leucadendra or M. fluviatilis and/or Casuarina cunninghamiana open-forest on creek banks**


Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 24,896      15,145      61%

Species recorded: Total: 265; woody: 106; ground: 184; Avg. spp./site: 54.5; std dev.: 12.3, 6 site(s)

Basal area: Avg./site: 16.1 m<sup>2</sup>/ha, range: 4.0 - 26 m<sup>2</sup>/ha, std. deviation: 9 m<sup>2</sup>/ha, 5 site(s)

Structural formation: Open-forest: 27%; closed-forest: 7%; unrecorded: 67%, 15 site(s)

Representative sites: 19453, 19522, 32486, 40933, 40955, 44283, 44462, 44538, 44539, 44577, 44580, 44643, 44718, 45019.

**Stratum: E**

Height avg. = 13.0m, 1 site

*Frequent species (cover, frequency): Melaleuca leucadendra (20, 7%)*

**Stratum: T1**

Height avg. = 16.2m, range 5-24m, 14 sites

Crown cover avg. = 78.0%, range 60.0-90.0%, 5 sites

Stem density/ha avg. = 413, range 150-800, 5 sites

*Dominant species (relative cover, frequency): Casuarina cunninghamiana (62, 36%), Melaleuca leucadendra (56, 64%), Corymbia intermedia (25, 21%), Lophostemon suaveolens (24, 71%)*

*Frequent species (cover, frequency): Lophostemon suaveolens (16, 71%), Melaleuca leucadendra (32, 64%), Casuarina cunninghamiana (40, 36%), Corymbia intermedia (7, 21%), Allocasuarina littoralis (2, 14%), Nauclera orientalis (7, 14%), Archontophoenix alexandrae (7%), Corymbia trachyphloia (46, 7%), Eucalyptus exserta (12, 7%), Eucalyptus platyphylla (11, 7%), Eucalyptus portuensis (3, 7%), Ficus indet. (7%), Freycinetia excelsa (7%), Glochidion ferdinandi (7%), Lophostemon grandiflorus (12, 7%), Melaleuca fluviatilis (47, 7%), Melia azedarach (7%), Syncarpia glomulifera subsp. glomulifera (4, 7%), Timonius timon var. timon (6, 7%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.3a

### Stratum: T2

Height avg. = 8.7m, range 3-17m, 11 sites

Crown cover avg. = 43.0%, range 28.0-60.0%, 5 sites

Stem density/ha avg. = 1349, range 100-5533, 5 sites

Dominant species (relative cover, frequency): *Grevillea banksii* (40, 21%), *Litsea leefeana* (34, 21%), *Melaleuca leucadendra* (29, 21%), *Glochidion ferdinandi* (24, 21%), *Glochidion sumatranum* (9, 21%)

Frequent species (cover, frequency): *Lophostemon suaveolens* (1, 29%), *Acacia aulacocarpa* (2, 21%), *Elaeocarpus eumundi* (21%), *Glochidion ferdinandi* (16, 21%), *Glochidion sumatranum* (1, 21%), *Grevillea banksii* (4, 21%), *Litsea leefeana* (24, 21%), *Melaleuca leucadendra* (7, 21%), *Acacia flavescentia* (14%), *Allocasuarina littoralis* (16, 14%), *Casuarina cunninghamiana* (10, 14%), *Macaranga involucrata* (3, 14%), *Melaleuca viminalis* (4, 14%), *Melicope elleryana* (2, 14%), *Nauclea orientalis* (14, 14%), *Scolopia braunii* (14%), *Syzygium australe* (1, 14%), *Acmena smithii* (12, 7%), *Allocasuarina torulosa* (2, 7%), *Alphitonia excelsa* (7%), *Alstonia scholaris* (7%), *Angiosperm indet.* (7%), *Archontophoenix alexandrae* (6, 7%), *Argyrodendron polyandrum* (7%), *Atractocarpus fitzalanii* (7%), *Austrostreensia indet.* (7%), *Carallia brachiata* (20, 7%), *Chionanthus ramiflora* (7%), *Cryptocarya hypospodia* (7%), *Cryptocarya vulgaris* (7%), *Cyclophyllum coprosmoides* (7%), *Dendrocnide moroides* (7%), *Diospyros geminata* (7%), *Diploglottis obovata* (7%), *Dodonaea triquetra* (30, 7%), *Eucalyptus platyphylla* (5, 7%), *Eucalyptus portuensis* (7%), *Ficus congesta* (7%), *Ficus congesta* var. *congesta* (2, 7%), *Ficus indet.* (7%), *Ficus racemosa* (7%), *Fitzalania heteropetala* (7%), *Hibiscus heterophyllus* (7%), *Jagera pseudorhus* var. *pseudorhus* (7%), *Lantana camara*\* (7%), *Leptospermum polygalifolium* (2, 7%), *Lophostemon grandiflorus* (2, 7%), *Macaranga tanarius* (7%), *Maclura cochinchinensis* (7%), *Mallotus philippensis* (12, 7%), *Pandanus indet.* (2, 7%), *Parsonsia indet.* (7%), *Pipturus argenteus* (7%), *Planchonia careya* (5, 7%), *Polyalthia nitidissima* (7%), *Polyscias elegans* (2, 7%), *Syncarpia glomulifera* subsp. *glomulifera* (2, 7%), *Timonius timon* var. *timon* (12, 7%)

### Stratum: T3

Height avg. = 3.5m, range 3-5m, 4 sites

Crown cover avg. = 26.0%, range 13.0-39.0%, 2 sites

Stem density/ha avg. = 445, range 350-540, 2 sites

Dominant species (relative cover, frequency): *Acacia flavescentia* (13, 21%)

Frequent species (cover, frequency): *Acacia flavescentia* (2, 21%), *Lantana camara*\* (1, 14%), *Melaleuca viminalis* (17, 14%), *Acacia aulacocarpa* (2, 7%), *Allocasuarina littoralis* (11, 7%), *Casuarina cunninghamiana* (7, 7%), *Dodonaea indet.* (2, 7%), *Ficus congesta* var. *congesta* (2, 7%), *Ficus coronata* (7%), *Glochidion ferdinandi* (10, 7%), *Grevillea banksii* (5, 7%), *Hibiscus heterophyllus* (7%), *Lophostemon grandiflorus* (7%), *Lygodium microphyllum* (2, 7%), *Mackinlaya macrosciadea* (2, 7%), *Melaleuca leucadendra* (2, 7%), *Melaleuca viridiflora* var. *viridiflora* (7%), *Pandanus tectorius* (7%), *Syzygium oleosum* (2, 7%)

### Stratum: S1

Height avg. = 2.3m, range 1-4m, 8 sites

Crown cover avg. = 11.3%, range 6.0-15.0%, 3 sites

Stem density/ha avg. = 4009, range 1480-6296, 3 sites

Dominant species (relative cover, frequency): *Lantana camara*\* (29, 36%), *Smilax glyciphylla* (8, 29%), *Glochidion ferdinandi* (6, 36%), *Scolopia braunii* (4, 21%)

Frequent species (cover, frequency): *Glochidion ferdinandi* (36%), *Lantana camara*\* (3, 36%), *Smilax glyciphylla* (1, 29%), *Scolopia braunii* (2, 21%), *Acmena smithii* (14%), *Casuarina cunninghamiana* (1, 14%), *Elaeocarpus eumundi* (14%), *Ficus congesta* var. *congesta* (3, 14%), *Litsea leefeana* (14%), *Mackinlaya macrosciadea* (1, 14%), *Melaleuca viminalis* (3, 14%), *Polyscias australiana* (3, 14%), *Rubus moluccanus* var. *trilobus* (14%), *Syzygium australe* (11, 14%), *Timonius timon* var. *timon* (14%), *Acacia aulacocarpa* (2, 7%), *Acacia disparrima* (4, 7%), *Acacia disparrima* subsp. *disparrima* (20, 7%), *Acacia fimbriata* (2, 7%), *Acacia indet.* (2, 7%), *Ageratum conyzoides* subsp. *conyzoides*\* (8, 7%), *Alphitonia excelsa* (7%), *Brennia oblongifolia* (5, 7%), *Carallia brachiata* (2, 7%), *Chionanthus ramiflora* (7%), *Cissus indet.* (7%), *Comesperma indet.* (7%), *Conyza sumatrensis*\* (7%), *Crotalaria pallida* (1, 7%), *Cryptocarya vulgaris* (7%), *Dodonaea triquetra* (7%), *Eclipta prostrata* (7%), *Endiandra discolor* (7%), *Euroschinus falcatus* (7%), *Glochidion apodogynum* (7%), *Glochidion sumatranum* (7%), *Grevillea banksii* (7%), *Hibiscus indet.* (7%), *Homalanthus nutans* (7%), *Jagera pseudorhus* var. *pseudorhus* (5, 7%), *Leptospermum polygalifolium* (7%), *Litsea fawcettiana* (7%), *Lophostemon suaveolens* (7%), *Ludwigia octovalvis* (7%), *Macaranga indet.* (7%), *Macaranga involucrata* (7%), *Macaranga tanarius* (10, 7%), *Mallotus mollissimus* (5, 7%), *Melaleuca viridiflora* var. *viridiflora* (7%), *Melastoma malabathricum* (7%), *Melastoma malabathricum* subsp. *malabathricum* (5, 7%), *Melicope elleryana* (7%), *Nauclea orientalis* (2, 7%), *Neolitsea brassii* (7%), *Pandanus brookei* (7%), *Planchonia careya* (7%), *Polygonolobus reticulatus* (7%), *Psychotria poliostemma* (7%), *Salvia misella*\* (1, 7%), *Trema tomentosa* (2, 7%), *Trema tomentosa* var. *aspera* (5, 7%), *Triumfetta rhomboidea*\* (7%), *Xanthorrhoea johnsonii* (2, 7%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.3a

### Stratum: S2

Height avg. = 1.5m, 1 site

Frequent species (cover, frequency): *Acacia leiocalyx* (5, 7%), *Casuarina cunninghamiana* (5, 7%), *Grevillea banksii* (5, 7%), *Lantana camara\** (30, 7%), *Macaranga tanarius* (5, 7%), *Planchonia careya* (10, 7%)

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### Stratum: G

Height avg. = 0.4m, range 0.15-0.6m, 5 sites

PFC avg. = 31.4%, range 4-69%, 5 sites

Dominant species (relative cover, frequency): *Scleria sphacelata* (21, 50%), *Ottochloa nodosa* (19, 50%), *Adiantum hispidulum* (17, 33%), *Lomandra longifolia* (10, 67%), *Gahnia aspera* (9, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Gahnia aspera* (4, 67%), *Oplismenus aemulus* (50%), *Ottochloa nodosa* (9, 50%), *Scleria sphacelata* (12, 50%), *Chrysopogon filipes* (1, 33%), *Cyperus trinervis* (33%), *Entolasia stricta* (33%), *Fimbristylis dichotoma* (1, 33%), *Oplismenus burmannii* (1, 33%), *Paspalidium distans* (33%), *Scleria ciliaris* (2, 33%), *Axonopus compressus\** (14, 17%), *Baumea juncea* (4, 17%), *Bothriochloa bladhii* (5, 17%), *Bothriochloa decipiens* var. *decipiens* (17%), *Capillipedium* indet. (17%), *Chrysopogon fallax* (17%), *Cymbopogon bombycinus* (17%), *Cyperus aquatilis* (1, 17%), *Cyperus distans* (17%), *Cyperus gracilis* (17%), *Cyperus haspan* (17%), *Cyperus haspan* subsp. *juncoides* (17%), *Cyperus lucidus* (17%), *Cyperus polystachyos* var. *polystachyos* (1, 17%), *Echinochloa colonia\** (17%), *Eriachne pallescens* (1, 17%), *Eriachne rara* (17%), *Fimbristylis* indet. (17%), *Fimbristylis tetragona* (17%), *Fimbristylis tristachya* (1, 17%), *Ischaemum australe* (9, 17%), *Ischaemum fragile* (17%), *Ischaemum* indet. (17%), *Isolepis* indet. (17%), *Lepironia articulata* (17%), *Panicum simile* (17%), *Paspalum conjugatum\** (17%), *Sacciolepis indica* (17%), *Schoenus apogon* var. *apogon* (2, 17%), *Scleria* indet. (17%), *Scleria mackaviensis* (17%), *Scleria polycarpa* (1, 17%)

FORBS: *Passiflora suberosa\** (1, 100%), *Dianella caerulea* (1, 83%), *Emilia sonchifolia\** (1, 83%), *Adiantum aethiopicum* (1, 67%), *Eustrephus latifolius* (67%), *Lomandra longifolia* (5, 67%), *Asclepias curassavica\** (50%), *Geitonoplesium cymosum* (50%), *Triumfetta rhomboidea\** (50%), *Adiantum hispidulum* (10, 33%), *Christella dentata* (33%), *Crassocephalum crepidioides\** (33%), *Cyanthillium cinereum* (33%), *Eclipta prostrata* (33%), *Hedyotis auricularia* var. *melanesica* (33%), *Lantana camara\** (33%), *Lindsaea ensifolia* (33%), *Lomandra hystrix* (1, 33%), *Mecardonia procumbens\** (33%), *Momordica charantia\** (33%), *Passiflora edulis\** (33%), *Philydrum lanuginosum* (33%), *Phyllanthus* indet. (33%), *Phyllanthus virgatus* (33%), *Praxelis clematidea\** (33%), *Pseuderanthemum variabile* (33%), *Pteridium esculentum* (33%), *Sida rhombifolia\** (33%), *Acacia disparrima* (17%), *Acacia flavescens* (17%), *Acacia leptocarpa* (17%), *Acmella grandiflora* var. *brachyglossa* (17%), *Ageratum conyzoides* (17%), *Ageratum conyzoides* subsp. *conyzoides\** (9, 17%), *Ageratum houstonianum\** (17%), *Alchornea thozetiana* (17%), *Alphitonia excelsa* (17%), *Aneilema acuminatum* (17%), *Aristolochia elegans\** (17%), *Bidens pilosa\** (2, 17%), *Blechnum orientale* (17%), *Bowenia serrulata* (17%), *Calyptocarpus vialis\** (17%), *Centella asiatica* (17%), *Cissus oblonga* (17%), *Cleome aculeata\** (17%), *Commelina diffusa* (17%), *Commelina* indet. (17%), *Conzya sumatrensis\** (1, 17%), *Cordyline manners-suttoniae* (17%), *Crotalaria montana* (17%), *Crotalaria pallida* (1, 17%), *Dianella rara* (17%), *Dioscorea transversa* (17%), *Dodonaea lanceolata* var. *subsessilifolia* (17%), *Doryopteris concolor* (17%), *Drosera spatulata* (17%), *Drymaria cordata\** (17%), *Epaltes australis* (17%), *Eriocaulon nanum* (17%), *Exocarpos latifolius* (17%), *Ficus congesta* (17%), *Flemingia parviflora* (17%), *Freycinetia excelsa* (17%), *Glochidion lobocarpum* (17%), *Gonocarpus chinensis* subsp. *verrucosus* (1, 17%), *Gonocarpus micranthus* subsp. *ramosissimus* (17%), *Hibiscus* indet. (17%), *Hovea clavata* (17%), *Hyptis suaveolens\** (17%), *Lobelia membranacea* (17%), *Ludwigia octovalvis* (17%), *Lygodium microphyllum* (17%), *Macaranga tanarius* (17%), *Mackinlaya macrosciadea* (17%), *Melaleuca leucadendra* (17%), *Melastoma malabathricum* (17%), *Melicope elleryana* (17%), *Mimosa pudica\** (17%), *Mitracarpus hirtus\** (17%), *Nephrolepis cordifolia* (17%), *Pandanus* indet. (17%), *Parsonia straminea* (17%), *Passiflora foetida\** (17%), *Phyllanthus debilis\** (17%), *Piper hederaceum* (17%), *Piper* indet. (17%), *Planchonia careya* (17%), *Pogonolobus reticulatus* (17%), *Polyscias australiana* (17%), *Pycnospora lutescens* (17%), *Richardia brasiliensis\** (17%), *Rivina humilis\** (1, 17%), *Rubus moluccanus* var. *trilobus* (17%), *Salvia misella\** (17%), *Sauvagesia albiflorus* (17%), *Scoparia dulcis\** (17%), *Sigesbeckia orientalis* (17%), *Smilax australis* (17%), *Solanum seaforthianum\** (17%), *Spermacoce brachystema* (17%), *Stachytarpheta jamaicensis\** (17%), *Stephania japonica* (17%), *Sticherus flabellatus* (17%), *Stylium diffusum* (17%), *Stylium tenerum* (17%), *Synedrella nodiflora\** (17%), *Tridax procumbens\** (17%), *Urena lobata\** (4, 17%), *Utricularia uliginosa* (17%), *Xanthorrhoea latifolia* subsp. *latifolia* (17%), *Xyris complanata* (17%), *Youngia japonica* (17%)

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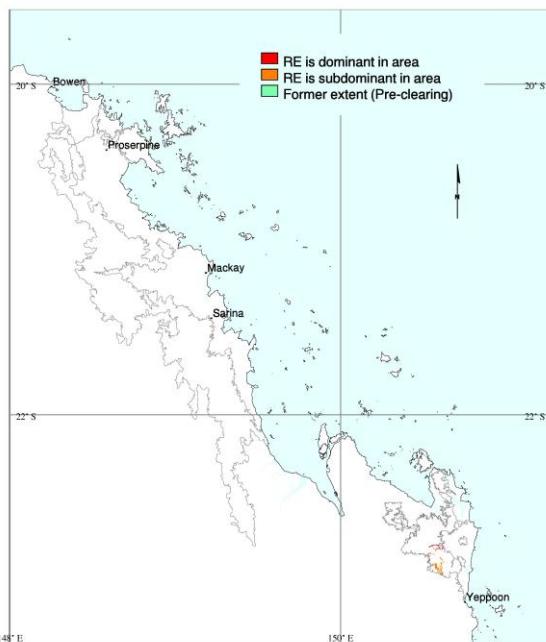
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22/11/2012

**Melaleuca leucadendra +/- Syncarpia glomulifera +/- rainforest spp. open-forest on rocky creek banks (subregions 4 and 5)**



Joy Bushe

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 306 302 99%

Species recorded: Total: 156; woody: 96; ground: 68; Average species per site and standard deviation not available

Basal area: Not available

Structural formation: Unrecorded: 100%, 6 site(s)

Representative sites: 44265, 44273, 44537, 44598, 44620, 44621.

### Stratum: E

Height avg. = 23.0m, range 20-29m, 3 sites

Dominant species (relative cover, frequency): *Syncarpia glomulifera* subsp. *glomulifera* (75, 33%), *Eucalyptus portuensis* (50, 33%)

Frequent species (cover, frequency): *Eucalyptus portuensis* (4, 33%), *Syncarpia glomulifera* subsp. *glomulifera* (3, 33%), *Corymbia trachyphloia* (2, 17%), *Pleiogynium timorense* (2, 17%), *Syncarpia glomulifera* (2, 17%)

### Stratum: T1

Height avg. = 16.3m, range 9-22m, 6 sites

Dominant species (relative cover, frequency): *Corymbia intermedia* (69, 33%), *Melaleuca leucadendra* (66, 33%), *Lophostemon suaveolens* (19, 33%), *Syncarpia glomulifera* subsp. *glomulifera* (6, 33%)

Frequent species (cover, frequency): *Corymbia intermedia* (14, 33%), *Lophostemon suaveolens* (4, 33%), *Melaleuca leucadendra* (13, 33%), *Syncarpia glomulifera* subsp. *glomulifera* (3, 33%), *Acronychia laevis* (6, 17%), *Aglaia* indet. (6, 17%), *Allocasuarina littoralis* (4, 17%), *Callistemon* indet. (4, 17%), *Cryptocarya vulgaris* (37, 17%), *Eucalyptus crebra* (2, 17%), *Eucalyptus platyphylla* (17%), *Eucalyptus portuensis* (3, 17%), *Eucalyptus tereticornis* (17%), *Pandanus* indet. (17%), *Polyalthia nitidissima* (6, 17%), *Pouteria sericea* (6, 17%), *Syncarpia glomulifera* (9, 17%), *Syzygium* indet. (15, 17%), *Syzygium oleosum* (9, 17%), *Timonius timon* var. *timon* (6, 17%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.3b

### Stratum: T2

Height avg. = 6.8m, range 4-9m, 6 sites

Dominant species (relative cover, frequency): *Allocasuarina littoralis* (33, 50%), *Allocasuarina torulosa* (28, 33%), *Pouteria sericea* (18, 33%), *Acacia flavescens* (14, 50%), *Syzygium oleosum* (13, 50%)

Frequent species (cover, frequency): *Acacia aulacocarpa* (4, 67%), *Acacia flavescens* (3, 50%), *Allocasuarina littoralis* (6, 50%), *Syzygium oleosum* (7, 50%), *Acacia fimbriata* (2, 33%), *Allocasuarina torulosa* (8, 33%), *Banksia integrifolia* subsp. *compar* (2, 33%), *Calophyllum australianum* (3, 33%), *Cryptocarya vulgaris* (10, 33%), *Persoonia amaliae* (2, 33%), *Pouteria sericea* (10, 33%), *Acronychia laevis* (10, 17%), *Aglaiia indet.* (5, 17%), *Callistemon indet.* (2, 17%), *Chionanthus ramiflora* (17%), *Dodonaea triquetra* (2, 17%), *Drypetes deplanchei* (2, 17%), *Endiandra indet.* (2, 17%), *Glochidion sumatranum* (17%), *Grevillea banksii* (5, 17%), *Grevillea venusta* (2, 17%), *Hibiscus divaricatus* (17%), *Lantana camara*\* (2, 17%), *Leptospermum polygalifolium* (17%), *Lophostemon suaveolens* (2, 17%), *Macaranga involucrata* var. *mallotoides* (17%), *Mackinlaya macrosciadea* (2, 17%), *Pandanus indet.* (17%), *Planchonia careya* (2, 17%), *Polyalthia nitidissima* (2, 17%), *Polyscias australiana* (2, 17%), *Pouteria queenslandica* (17%), *Psychotria daphnoides* (5, 17%), *Psydrax lamprophylla* (5, 17%), *Syzygium indet.* (5, 17%), *Timonius timon* var. *timon* (2, 17%)

### Stratum: T3

Height avg. = 2.5m, range 2-3m, 2 sites

Dominant species (relative cover, frequency): *Syzygium oleosum* (14, 33%), *Rhodomyrtus trineura* (14, 33%), *Cryptocarya vulgaris* (8, 33%), *Allocasuarina littoralis* (4, 33%)

Frequent species (cover, frequency): *Allocasuarina littoralis* (2, 33%), *Cryptocarya vulgaris* (4, 33%), *Rhodomyrtus trineura* (6, 33%), *Syzygium oleosum* (6, 33%), *Acrotriche aggregata* (2, 17%), *Allocasuarina torulosa* (2, 17%), *Alyxia magnifolia* (5, 17%), *Archontophoenix cunninghamiana* (2, 17%), *Callistemon indet.* (5, 17%), *Calophyllum australianum* (2, 17%), *Dampiera ferruginea* (17%), *Dodonaea triquetra* (2, 17%), *Elaeocarpus eumundi* (17%), *Ficus congesta* var. *congesta* (2, 17%), *Grevillea venusta* (2, 17%), *Hibbertia velutina* (2, 17%), *Leptospermum polygalifolium* (2, 17%), *Litsea fawcettiana* (17%), *Litsea leefeana* (17%), *Macaranga involucrata* (2, 17%), *Mackinlaya macrosciadea* (5, 17%), *Melodinus australis* (2, 17%), *Niemeyera antiloga* (17%), *Passiflora suberosa*\* (2, 17%), *Phebalium woombye* (2, 17%), *Pittosporum ferrugineum* (2, 17%), *Polyalthia nitidissima* (2, 17%), *Polyscias australiana* (5, 17%), *Pomaderris indet.* (2, 17%), *Pouteria chartacea* (17%), *Pouteria sericea* (2, 17%), *Psydrax lamprophylla* (5, 17%), *Scolopia braunii* (2, 17%), *Smilax glyciphylla* (5, 17%), *Timonius timon* var. *timon* (2, 17%)

### Stratum: S1

Height avg. = 2.4m, range 1-3m, 5 sites

Dominant species (relative cover, frequency): *Glochidion ferdinandi* (15, 33%), *Acacia flavescens* (14, 50%), *Scolopia braunii* (12, 33%), *Planchonia careya* (12, 33%), *Grevillea banksii* (12, 33%)

Frequent species (cover, frequency): *Grevillea venusta* (2, 67%), *Acacia flavescens* (3, 50%), *Acacia aulacocarpa* (4, 33%), *Breynia oblongifolia* (2, 33%), *Dodonaea triquetra* (1, 33%), *Euroschinus falcatus* (1, 33%), *Glochidion ferdinandi* (4, 33%), *Grevillea banksii* (4, 33%), *Leptospermum polygalifolium* (4, 33%), *Melaleuca* sp. (Mt Wheeler P.I. Forster + PIF13792) (1, 33%), *Niemeyera antiloga* (1, 33%), *Planchonia careya* (3, 33%), *Scolopia braunii* (4, 33%), *Acacia fimbriata* (2, 17%), *Acacia julifera* subsp. *curvinervia* (2, 17%), *Acacia leptocarpa* (2, 17%), *Acacia maidenii* (17%), *Acronychia laevis* (2, 17%), *Acrotriche aggregata* (17%), *Alphitonia excelsa* (5, 17%), *Alyxia ruscifolia* (2, 17%), *Babingtonia bidwillii* (10, 17%), *Callistemon indet.* (17%), *Carallia brachiata* (2, 17%), *Commersonia bartramia* (17%), *Daviesia umbellulata* (2, 17%), *Dodonaea indet.* (2, 17%), *Endiandra discolor* (17%), *Flagellaria indica* (2, 17%), *Geijera indet.* (2, 17%), *Hibbertia vestita* (2, 17%), *Hovea clavata* (2, 17%), *Lantana camara*\* (2, 17%), *Melastoma malabathricum* subsp. *malabathricum* (2, 17%), *Mischarytera lautereriana* (17%), *Pandanus tectorius* (17%), *Philotheeca difformis* subsp. *smithiana* (5, 17%), *Pogonolobus reticulatus* (2, 17%), *Pomaderris ferruginea* (2, 17%), *Rhodomyrtus indet.* (2, 17%), *Rhodomyrtus trineura* (17%), *Rubiaceae indet.* (2, 17%), *Sapindaceae indet.* (2, 17%), *Syzygium australe* (5, 17%), *Tylophora indet.* (17%)

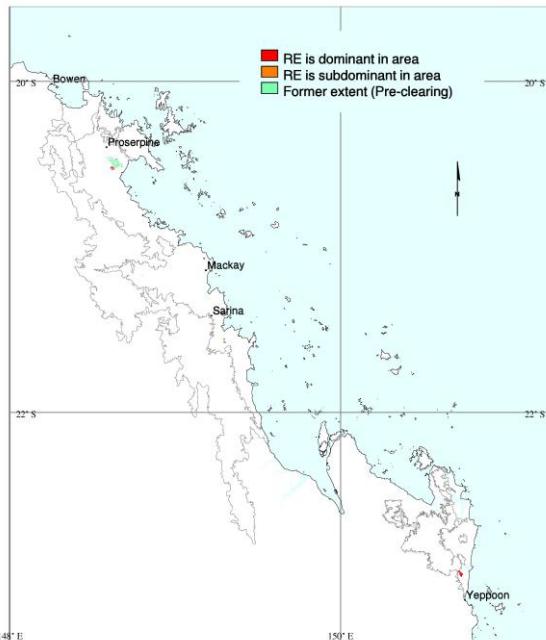
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Freshwater wetlands with permanent water and aquatic vegetation**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,835 570 31%

Species recorded: Total: 14; woody: 0; ground: 14; Avg. spp./site: 8.0; std dev.: 1.0, 2 site(s)

Basal area: 0

Structural formation: Tussock grassland: 50%; open-sedgeland: 50%, 2 site(s)

Representative sites: 27139, 36312.

**Stratum: G**

Height avg. = 0.8m, range 0.5-1m, 2 sites

PFC avg. = 38.5%, range 10-67%, 2 sites

*Dominant species (relative cover, frequency): Eleocharis dulcis (83, 50%), Urochloa mutica\* (83, 50%), Leersia hexandra (8, 100%), Panicum paludosum (3, 50%), Nymphaoides indica (3, 100%)*

*Frequent species (cover, frequency): GRAMINOIDs: Leersia hexandra (5, 100%), Cyperus alopecuroides (50%), Echinochloa dietrichiana (50%), Eleocharis dulcis (8, 50%), Panicum paludosum (50%), Phragmites australis (50%), Poaceae indet. (50%), Urochloa mutica\* (56, 50%)*

*FORBS: Nymphaoides indica (100%), Ludwigia peploides (1, 50%), Nymphaea gigantea (50%), Persicaria decipiens (50%), Persicaria indet. (50%), Philydrum lanuginosum (50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

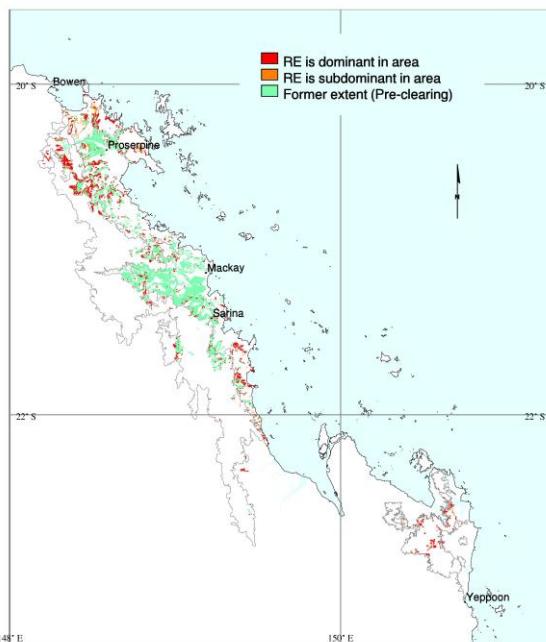
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.5

### **Eucalyptus platyphylla and/or Lophostemon suaveolens and/or Corymbia clarkeana woodland on alluvial plains**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 153,941 21,298 14%

Species recorded: Total: 225; woody: 53; ground: 182; Avg. spp./site: 70.0; std dev.: 7.1, 3 site(s)

Basal area: Avg./site: 15.5 m<sup>2</sup>/ha, range: 4.0 - 23 m<sup>2</sup>/ha, std. deviation: 6 m<sup>2</sup>/ha, 8 site(s)

Structural formation: Woodland: 31%; open-forest: 13%; low woodland: 6%; unrecorded: 50%, 16 site(s)

Representative sites: 33225, 36149, 36205, 36206, 36325, 36464, 36644, 36831, 44142, 44248, 44260, 44261, 44567, 44584, 44588, 44624.

#### Stratum: E

Height avg. = 12.0m, 1 site

Crown cover avg. = 4.0%, 1 site

Frequent species (cover, frequency): *Eucalyptus drepanophylla* (4, 6%)

#### Stratum: T1

Height avg. = 16.7m, range 7-24m, 16 sites

Crown cover avg. = 44.6%, range 20.0-74.0%, 8 sites

Stem density/ha avg. = 507, range 133-1333, 4 sites

Dominant species (relative cover, frequency): *Lophostemon suaveolens* (47, 50%), *Eucalyptus platyphylla* (38, 94%), *Corymbia intermedia* (30, 25%), *Corymbia clarkeana* (21, 44%)

Frequent species (cover, frequency): *Eucalyptus platyphylla* (15, 94%), *Lophostemon suaveolens* (20, 50%), *Corymbia clarkeana* (9, 44%), *Corymbia intermedia* (5, 25%), *Corymbia dallachiana* (12, 19%), *Melaleuca viridiflora* var. *viridiflora* (18, 19%), *Eucalyptus drepanophylla* (5, 13%), *Acacia leptocarpa* (27, 6%), *Babingtonia* indet. (5, 6%), *Corymbia tessellaris* (20, 6%), *Eucalyptus tereticornis* (6%), *Melaleuca nervosa* (6%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

## Technical Description

## Regional ecosystem: 8.3.5

### Stratum: T2

Height avg. = 8.9m, range 5-15m, 12 sites

Crown cover avg. = 18.3%, range 13.0-27.0%, 6 sites

Stem density/ha avg. = 311, range 80-533, 3 sites

Dominant species (relative cover, frequency): *Planchonia careya* (54, 25%), *Melaleuca viridiflora* var. *viridiflora* (54, 44%), *Lophostemon suaveolens* (48, 25%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (12, 44%), *Lophostemon suaveolens* (11, 25%), *Planchonia careya* (8, 25%), *Corymbia clarksoniana* (19%), *Eucalyptus platyphylla* (1, 19%), *Acacia leiocalyx* (13, 13%), *Allocasuarina torulosa* (18, 13%), *Acacia leptocarpa* (5, 6%), *Albizia procera* (2, 6%), *Corymbia tessellaris* (6%), *Eucalyptus drepanophylla* (7, 6%), *Melaleuca nervosa* (6%), *Petalostigma triloculare* (2, 6%)

### Stratum: T3

Height avg. = 6.0m, range 6-6m, 2 sites

Crown cover avg. = 17.5%, range 12.0-23.0%, 2 sites

Stem density/ha avg. = 920, range 760-1080, 2 sites

Frequent species (cover, frequency): *Corymbia clarksoniana* (1, 13%), *Planchonia careya* (11, 13%), *Eucalyptus platyphylla* (6%), *Melaleuca viridiflora* var. *viridiflora* (11, 6%)

### Stratum: S1

Height avg. = 1.7m, range 0.8-3m, 15 sites

Crown cover avg. = 6.3%, range 0.0-20.0%, 8 sites

Stem density/ha avg. = 890, range 560-1333, 4 sites

Dominant species (relative cover, frequency): *Acacia leptocarpa* (56, 25%), *Planchonia careya* (30, 50%), *Melaleuca viridiflora* var. *viridiflora* (30, 50%), *Lantana camara*\* (30, 31%), *Eucalyptus platyphylla* (20, 31%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (3, 50%), *Planchonia careya* (3, 50%), *Eucalyptus platyphylla* (5, 31%), *Lantana camara*\* (5, 31%), *Acacia leptocarpa* (9, 25%), *Alphitonia excelsa* (19%), *Acacia leiocalyx* (2, 13%), *Allocasuarina torulosa* (4, 13%), *Clerodendrum floribundum* (13%), *Corymbia clarksoniana* (13%), *Corymbia dallachiana* (1, 13%), *Glochidion lobocarpum* (13%), *Jagera pseudorhus* var. *pseudorhus* (1, 13%), *Lophostemon suaveolens* (1, 13%), *Melaleuca nervosa* (13%), *Acacia flavescens* (5, 6%), *Acacia holosericea* (6%), *Acacia indet.* (5, 6%), *Albizia procera* (6%), *Breynia oblongifolia* (6%), *Brucea javanica* (6%), *Cupaniopsis anacardioides* (1, 6%), *Diospyros geminata* (6%), *Diospyros indet.* (6%), *Eustrephus latifolius* (6%), *Ficus opposita* (6%), *Flueggea virosa* (2, 6%), *Ganophyllum falcatum* (6%), *Geijera salicifolia* (6%), *Glochidion apodogynum* (6%), *Hyptis suaveolens*\* (6%), *Indigofera hirsuta* (6%), *Jacksonia scoparia* (2, 6%), *Larsenaikia jardinei* (6%), *Macaranga tanarius* (6%), *Pandanus indet.* (1, 6%), *Pogonolobus reticulatus* (1, 6%), *Sida cordifolia*\* (6%), *Sterculia quadrifida* (6%), *Tabernaemontana orientalis* (6%), *Terminalia muelleri* (6%), *Timonius timon* var. *timon* (2, 6%), *Trema tomentosa* var. *aspera* (6%), *Urena lobata*\* (6%)

### Stratum: S2

Height avg. = 1.3m, range 1-1.5m, 3 sites

Crown cover avg. = 4.0%, range 2.0-7.0%, 3 sites

Stem density/ha avg. = 420, range 400-440, 2 sites

Frequent species (cover, frequency): *Planchonia careya* (1, 19%), *Lantana camara*\* (2, 13%), *Melaleuca viridiflora* var. *viridiflora* (1, 13%), *Cajanus reticulatus* (6%), *Cassytha pubescens* (6%), *Cupaniopsis anacardioides* (1, 6%), *Flueggea virosa* (1, 6%), *Indigofera hirsuta* (6%), *Pandanus indet.* (1, 6%), *Pogonolobus reticulatus* (6%), *Tabernaemontana orientalis* (6%), *Terminalia muelleri* (6%), *Urena lobata*\* (2, 6%), *Xanthorrhoea indet.* (6%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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22/11/2012

## Technical Description

## Regional ecosystem: 8.3.5

### Stratum: G

Height avg. = 0.5m, range 0.15-1m, 3 sites

PFC avg. = 41.7%, range 29-49%, 3 sites

Dominant species (relative cover, frequency): *Urochloa subquadripara*\* (35, 33%), *Lomandra longifolia* (16, 67%), *Heteropogon triticeus* (15, 67%), *Mnesitheia rottboellioides* (12, 33%), *Abildgaardia ovata* (10, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Digitaria parviflora* (100%), *Eragrostis brownii* (1, 100%), *Scleria brownii* (1, 100%), *Bothriochloa pertusa*\* (4, 67%), *Digitaria longiflora* (67%), *Eremochloa bimaculata* (2, 67%), *Fimbristylis dichotoma* (67%), *Heteropogon contortus* (2, 67%), *Heteropogon triticeus* (8, 67%), *Panicum effusum* (67%), *Paspalidium distans* (2, 67%), *Poaceae indet.* (1, 67%), *Abildgaardia ovata* (3, 33%), *Abildgaardia vaginata* (33%), *Alloteropsis semialata* (1, 33%), *Aristida acuta* (33%), *Aristida warburgii* (33%), *Bothriochloa bladhii* subsp. *bladhii* (33%), *Bulbostylis barbata* (33%), *Capillipedium spicigerum* (33%), *Chloris indet.* (33%), *Chrysopogon fallax* (4, 33%), *Cymbopogon refractus* (33%), *Cyperus compressus*\* (33%), *Cyperus distans* (33%), *Cyperus indet.* (33%), *Cyperus scaber* (33%), *Cyperus scariosus* (33%), *Cyperus zollingeri* (33%), *Dactyloctenium aegyptium*\* (33%), *Digitaria ciliaris*\* (4, 33%), *Digitaria eriantha*\* (33%), *Eragrostis spartinaeoides* (33%), *Melinis repens*\* (33%), *Mnesitheia rottboellioides* (6, 33%), *Panicum seminudum* var. *cairnsianum* (2, 33%), *Paspalum notatum*\* (33%), *Perotis rara* (33%), *Schizachyrium fragile* (33%), *Schizachyrium pseudeulalia* (33%), *Setaria opismenoides* (33%), *Setaria surgens* (33%), *Sorghum nitidum forma aristatum* (33%), *Sporobolus fertilis*\* (33%), *Sporobolus indet.* (33%), *Sporobolus jacquemontii*\* (33%), *Themeda triandra* (33%), *Urochloa subquadripara*\* (19, 33%)

FORBS: *Flemingia parviflora* (1, 100%), *Galactia tenuiflora* (100%), *Glycine tomentella* (100%), *Planchonia careya* (100%), *Sida cordifolia*\* (100%), *Sida rhombifolia*\* (1, 100%), *Aeschynomene villosa*\* (67%), *Bidens bipinnata*\* (67%), *Chamaecrista absus* (67%), *Commelina lanceolata* (1, 67%), *Crotalaria goreensis*\* (67%), *Crotalaria montana* (67%), *Desmodium pullenii* (1, 67%), *Desmodium triflorum*\* (2, 67%), *Emilia sonchifolia*\* (67%), *Hybanthus enneaspermus* (67%), *Iphigenia indica* (67%), *Lomandra longifolia* (5, 67%), *Mitracarpus hirtus*\* (2, 67%), *Pycnospora lutescens* (67%), *Stachytarpheta jamaicensis*\* (4, 67%), *Thecanthes cornucopiae* (67%), *Triumfetta rhomboidea*\* (67%), *Abelmoschus moschatus* (33%), *Angiosperm indet.* (33%), *Anisomeles malabarica* (33%), *Aristolochia indet.* (33%), *Aristolochia pubera* (33%), *Aristolochia thozetii* (33%), *Bidens pilosa*\* (1, 33%), *Blumea saxatilis* (33%), *Cajanus reticulatus* (33%), *Calypocarpus vialis*\* (1, 33%), *Cassytha filiformis* (33%), *Centrosema molle*\* (33%), *Chamaecrista mimosoides* (33%), *Chamaecrista rotundifolia* (33%), *Cheilanthes nudiuscula* (33%), *Cheilanthes tenuifolia* (33%), *Commelina ensifolia* (33%), *Crinum indet.* (33%), *Crotalaria brevis* (33%), *Crotalaria mitchellii* subsp. *mitchellii* (33%), *Curculigo ensifolia* (33%), *Cyanthillium cinereum* (33%), *Desmodium filiforme* (1, 33%), *Desmodium gangeticum* (33%), *Desmodium heterocarpon* var. *strigosum* (33%), *Dianella caerulea* (33%), *Dianella longifolia* (33%), *Emilia sonchifolia* var. *sonchifolia*\* (33%), *Epaltes australis* (33%), *Eustrephus latifolius* (1, 33%), *Geodorum densiflorum* (33%), *Glochidion apodogynum* (33%), *Glochidion lobocarpum* (33%), *Glycine cyrtoloba* (1, 33%), *Grewia retusifolia* (33%), *Indigofera hirsuta* (33%), *Ipomoea plebeia* (33%), *Jasminum didymum* (33%), *Lantana camara*\* (33%), *Leucas indet.* (33%), *Leucas lavandulifolia*\* (33%), *Lindernia crustacea* (33%), *Lomandra multiflora* (33%), *Ludwigia octovalvis* (33%), *Mecardonia procumbens*\* (33%), *Mimosa pudica*\* (33%), *Mitrasacme pygmaea* (33%), *Murdannia graminea* (33%), *Passiflora suberosa*\* (33%), *Phyllanthus indet.* (33%), *Phyllanthus virgatus* (33%), *Polygala wightiana* (33%), *Portulaca pilosa*\* (33%), *Rostellularia adscendens* (33%), *Sida indet.* (33%), *Spermacoce brachystema* (33%), *Spermacoce indet.* (33%), *Stephania japonica* (33%), *Sterculia quadrifida* (33%), *Tacca leontopetaloides* (33%), *Tephrosia juncea* (33%), *Tridax procumbens*\* (33%), *Uraria picta* (33%), *Urena lobata*\* (33%), *Vigna radiata* var. *sublobata* (33%), *Vigna* sp. (Station Creek R.J.Lawn CQ3284) (33%), *Vigna vexillata* var. *youngiana* (33%), *Waltheria indica* (33%), *Zornia dyctiocarpa* var. *filiifolia* (33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

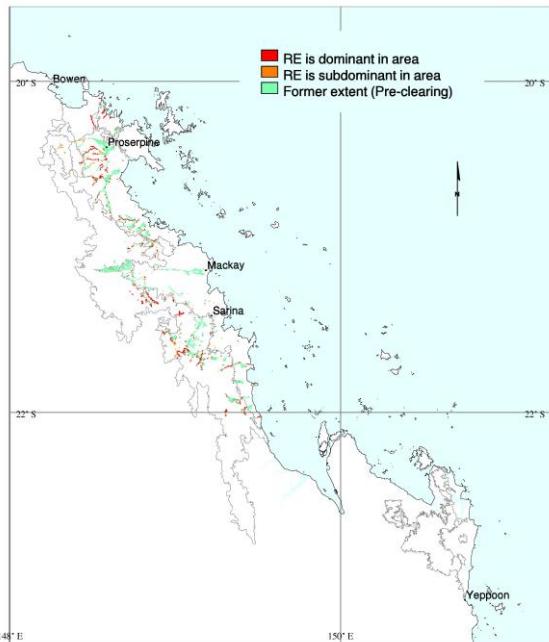
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.6a

**Eucalyptus tereticornis and/or Corymbia tessellaris +/- C. intermedia (or C. clarksoniana) +/- Lophostemon suaveolens open-forest on alluvial levees and lower terraces (subregions 1-3 and 6)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 55,399 5,858 11%

Species recorded: Total: 95; woody: 20; ground: 78; Avg. spp./site: 58.0; std dev.: 16.0, 2 site(s)

Basal area: Avg./site: 10.5 m<sup>2</sup>/ha, range: 9.0 - 12 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Woodland: 50%; closed-forest: 50%, 2 site(s)

Representative sites: 36645, 36664.

### Stratum: T1

Height avg. = 25.9m, range 25-26.7m, 2 sites

Crown cover avg. = 67.0%, range 45.0-89.0%, 2 sites

Stem density/ha avg. = 164, range 89-240, 2 sites

*Dominant species (relative cover, frequency): Eucalyptus platyphylla (68, 50%), Corymbia clarksoniana (56, 50%), Corymbia tessellaris (32, 50%), Eucalyptus tereticornis (29, 50%), Lophostemon suaveolens (16, 50%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (50, 50%), Corymbia tessellaris (14, 50%), Eucalyptus drepanophylla (50%), Eucalyptus platyphylla (31, 50%), Eucalyptus tereticornis (25, 50%), Lophostemon suaveolens (14, 50%)*

### Stratum: T2

Height avg. = 10.0m, range 5-15m, 2 sites

Crown cover avg. = 24.0%, range 15.0-33.0%, 2 sites

Stem density/ha avg. = 329, range 178-480, 2 sites

*Dominant species (relative cover, frequency): Lophostemon suaveolens (83, 50%), Eucalyptus platyphylla (35, 100%), Planchonia careya (27, 50%), Timonius timon var. timon (13, 50%), Corymbia clarksoniana (5, 50%)*

*Frequent species (cover, frequency): Eucalyptus platyphylla (7, 100%), Corymbia clarksoniana (2, 50%), Corymbia tessellaris (50%), Eucalyptus drepanophylla (50%), Lophostemon suaveolens (28, 50%), Planchonia careya (4, 50%), Timonius timon var. timon (2, 50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.6a

### Stratum: S1

Height avg. = 2.0m, range 2-2m, 2 sites

Crown cover avg. = 10.5%, range 8.0-13.0%, 2 sites

Stem density/ha avg. = 556, range 311-800, 2 sites

Dominant species (relative cover, frequency): *Timonius timon* var. *timon* (35, 50%), *Glochidion lobocarpum* (35, 50%), *Lantana camara*\* (31, 100%), *Planchonia careya* (23, 100%), *Ficus opposita* (8, 100%)

Frequent species (cover, frequency): *Ficus opposita* (1, 100%), *Lantana camara*\* (4, 100%), *Planchonia careya* (3, 100%), *Albizia procera* (50%), *Alphitonia excelsa* (50%), *Capparis canescens* (50%), *Diospyros geminata* (50%), *Glochidion lobocarpum* (3, 50%), *Hibiscus heterophyllus* (50%), *Indigofera pratensis* (50%), *Lophostemon suaveolens* (50%), *Timonius timon* var. *timon* (3, 50%)

### Stratum: S2

Height avg. = 1.6m, 1 site

Crown cover avg. = 92.0%, 1 site

Stem density/ha avg. = 19467, 1 site

Dominant species (relative cover, frequency): *Triumfetta rhomboidea*\* (87, 50%), *Urena lobata*\* (11, 50%), *Sida rhombifolia*\* (2, 50%)

Frequent species (cover, frequency): *Sida rhombifolia*\* (2, 50%), *Triumfetta rhomboidea*\* (80, 50%), *Urena lobata*\* (10, 50%)

### Stratum: G

Height avg. = 0.9m, 1 site

PFC avg. = 69.0%, range 66-72%, 2 sites

Dominant species (relative cover, frequency): *Heteropogon triticeus* (28, 50%), *Sorghum nitidum forma aristatum* (28, 100%), *Mimosa pudica*\* (13, 50%), *Heteropogon contortus* (11, 100%), *Urena lobata*\* (11, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Capillipedium spicigerum* (100%), *Heteropogon contortus* (8, 100%), *Mnesithea rottboellioides* (1, 100%), *Scleria brownii* (1, 100%), *Sorghum nitidum forma aristatum* (21, 100%), *Abildgaardia ovata* (50%), *Aristida queenslandica* var. *queenslandica* (50%), *Cyperus gracilis* (4, 50%), *Dichanthium tenue* (50%), *Digitaria longiflora* (50%), *Digitaria parviflora* (50%), *Eragrostis brownii* (50%), *Imbristylis dichotoma* (50%), *Heteropogon triticeus* (20, 50%), *Hyparrhenia rufa*\* (50%), *Imperata cylindrica* (3, 50%), *Megathyrsus maximus*\* (4, 50%), *Panicum effusum* (1, 50%), *Paspalidium distans* (50%), *Paspalum scrobiculatum* (50%), *Poaceae* indet. (50%), *Scleria levis* (50%), *Sporobolus jacquemontii*\* (1, 50%), *Themeda triandra* (50%)

FORBS: *Ageratum conyzoides* (2, 100%), *Bidens pilosa*\* (100%), *Desmodium heterocarpon* var. *strigosum* (100%), *Eustrephus latifolius* (100%), *Flemingia parviflora* (1, 100%), *Glycine tomentella* (1, 100%), *Passiflora foetida*\* (100%), *Passiflora suberosa*\* (100%), *Stachytarpheta jamaicensis*\* (1, 100%), *Stylosanthes guianensis*\* (100%), *Triumfetta rhomboidea*\* (3, 100%), *Alysicarpus schomburgkii* (50%), *Asteraceae* indet. (50%), *Blumea saxatilis* (50%), *Brunoniella australis* (50%), *Centrosema molle*\* (5, 50%), *Chamaecrista absus* (50%), *Chamaecrista rotundifolia* (50%), *Clematicissus opaca* (50%), *Crotalaria calycina* (50%), *Crotalaria montana* (50%), *Crotalaria pallida* (50%), *Curculigo ensifolia* (50%), *Cyanthillium cinereum* (50%), *Desmodium rhytidophyllum* (1, 50%), *Desmodium triflorum*\* (2, 50%), *Dianella caerulea* (50%), *Dianella longifolia* (50%), *Emilia sonchifolia*\* (50%), *Epaltes australis* (50%), *Euroschinus falcatus* (50%), *Fabaceae* indet. (50%), *Galactia tenuiflora* (50%), *Glycine cyrtoloba* (50%), *Grewia retusifolia* (50%), *Indigofera trifoliata* (50%), *Ipomoea plebeia* (50%), *Lindernia crustacea* (50%), *Lomandra longifolia* (4, 50%), *Mimosa pudica*\* (9, 50%), *Mitrasacme connata* (50%), *Murdannia gigantea* (50%), *Phyllanthus virgatus* (50%), *Pterocaulon sphacelatum* (50%), *Rhynchosia minima* (50%), *Sida cordifolia*\* (50%), *Sida* indet. (50%), *Sida rhombifolia*\* (50%), *Spermacoce brachystema* (50%), *Stylosanthes hamata*\* (50%), *Tephrosia filipes* (50%), *Uraria lagopodioides* (50%), *Urena lobata*\* (8, 50%), *Zornia muriculata* subsp. *angustata* (50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

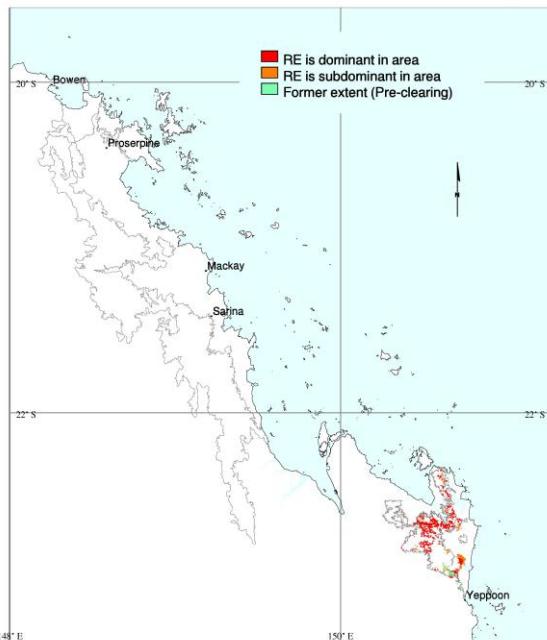
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.6c

### **Eucalyptus tereticornis and/or Corymbia intermedia +/- Lophostemon suaveolens open-forest on alluvium (subregions 4 and 5)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 11,484 9,712 85%

Species recorded: Total: 130; woody: 58; ground: 87; Avg. spp./site: 34.0; std dev.: 6.0, 2 site(s)

Basal area: Avg./site: 15.0 m<sup>2</sup>/ha, range: 15.0 - 15 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Woodland: 5%; open-forest: 5%; unrecorded: 90%, 20 site(s)

Representative sites: 19949, 44144, 44183, 44208, 44246, 44284, 44285, 44358, 44361, 44474, 44475, 44579, 44582, 44629, 44630, 44634, 44658, 44671, 44673, 44979.

#### Stratum: E

Height avg. = 22.0m, range 22-22m, 2 sites

Frequent species (cover, frequency): *Corymbia intermedia* (2, 10%), *Eucalyptus tereticornis* (5, 5%)

#### Stratum: T1

Height avg. = 21.6m, range 13-35m, 20 sites

Crown cover avg. = 50.0%, 1 site

Stem density/ha avg. = 40, 1 site

Dominant species (relative cover, frequency): *Corymbia intermedia* (53, 75%), *Lophostemon suaveolens* (39, 70%), *Eucalyptus tereticornis* (22, 95%), *Eucalyptus platyphylla* (11, 35%)

Frequent species (cover, frequency): *Eucalyptus tereticornis* (4, 95%), *Corymbia intermedia* (12, 75%), *Lophostemon suaveolens* (7, 70%), *Eucalyptus platyphylla* (2, 35%), *Eucalyptus crebra* (2, 15%), *Corymbia trachyphloia* (1, 10%), *Acacia aulacocarpa* (5%), *Allocasuarina littoralis* (2, 5%), *Brachychiton populneus* (5%), *Corymbia clarksoniana* (1, 5%), *Corymbia tessellaris* (5, 5%), *Eucalyptus exserta* (5%), *Eucalyptus portuensis* (3, 5%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.6c

### Stratum: T2

Height avg. = 9.8m, range 3-22m, 18 sites

Crown cover avg. = 17.0%, 1 site

Stem density/ha avg. = 80, 1 site

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (74, 30%), *Lophostemon suaveolens* (61, 35%), *Allocasuarina torulosa* (56, 50%), *Banksia integrifolia* subsp. *compar* (34, 25%)

Frequent species (cover, frequency): *Allocasuarina torulosa* (10, 50%), *Lophostemon suaveolens* (13, 35%), *Melaleuca viridiflora* var. *viridiflora* (15, 30%), *Banksia integrifolia* subsp. *compar* (8, 25%), *Alphitonia excelsa* (15%), *Eucalyptus platyphylla* (2, 15%), *Petalostigma triloculare* (3, 15%), *Acacia flavescens* (4, 10%), *Acacia leiocalyx* (2, 10%), *Planchonia careya* (4, 10%), *Acacia aulacocarpa* (2, 5%), *Acacia leptocarpa* (5, 5%), *Acacia maidenii* (2, 5%), *Acronychia imperforata* (2, 5%), *Breynia oblongifolia* (5%), *Chionanthus ramiflora* (5%), *Clematicissus opaca* (5%), *Clerodendrum floribundum* (2, 5%), *Corymbia intermedia* (5%), *Cymbidium canaliculatum* (5%), *Dodonaea lanceolata* var. *subsessilifolia* (5%), *Dysoxylum mollissimum* subsp. *molle* (2, 5%), *Glochidion lobocarpum* (5, 5%), *Grevillea banksii* (5, 5%), *Hibiscus heterophyllus* (5%), *Homalanthus nutans* (5, 5%), *Jagera pseudorhus* var. *pseudorhus* (5, 5%), *Lantana camara*\* (2, 5%), *Litsea fawcettiana* (5%), *Livistona decora* (2, 5%), *Lophostemon confertus* (2, 5%), *Macaranga* indet. (5, 5%), *Macaranga involucrata* (5, 5%), *Mallotus philippensis* (10, 5%), *Melaleuca leucadendra* (5, 5%), *Scolopia braunii* (2, 5%)

### Stratum: T3

Height avg. = 4.7m, range 3-8m, 9 sites

Crown cover avg. = 40.0%, 1 site

Stem density/ha avg. = 960, 1 site

Dominant species (relative cover, frequency): *Planchonia careya* (47, 25%)

Frequent species (cover, frequency): *Planchonia careya* (7, 25%), *Allocasuarina torulosa* (12, 20%), *Acacia leptocarpa* (11, 15%), *Melaleuca viridiflora* var. *viridiflora* (3, 15%), *Alphitonia excelsa* (3, 10%), *Lophostemon confertus* (2, 10%), *Acacia crassa* subsp. *longicoma* (2, 5%), *Acacia flavescens* (5, 5%), *Acacia* indet. (5, 5%), *Acacia leiocalyx* (5, 5%), *Allocasuarina littoralis* (17, 5%), *Eucalyptus platyphylla* (2, 5%), *Glochidion sumatranum* (5, 5%), *Hibiscus divaricatus* (5, 5%), *Livistona decora* (2, 5%), *Passiflora suberosa*\* (2, 5%), *Pouteria pohlmaniana* var. (*Gilbert River C.T.White 1409*) (5%), *Timonius timon* var. *timon* (2, 5%)

### Stratum: S1

Height avg. = 1.8m, range 1-3m, 8 sites

Crown cover avg. = 1.0%, 1 site

Stem density/ha avg. = 40, 1 site

Frequent species (cover, frequency): *Planchonia careya* (4, 20%), *Acacia leiocalyx* (8, 10%), *Alphitonia excelsa* (5, 10%), *Glochidion sumatranum* (3, 10%), *Lantana camara*\* (3, 10%), *Mallotus philippensis* (5, 10%), *Melaleuca viridiflora* var. *viridiflora* (11, 10%), *Passiflora suberosa*\* (5, 10%), *Timonius timon* var. *timon* (4, 10%), *Acacia aulacocarpa* (5, 5%), *Acacia crassa* subsp. *longicoma* (2, 5%), *Acacia* indet. (10, 5%), *Acacia leptocarpa* (5, 5%), *Acacia maidenii* (2, 5%), *Allocasuarina littoralis* (5%), *Allocasuarina torulosa* (2, 5%), *Eucalyptus* indet. (5, 5%), *Lophostemon confertus* (2, 5%), *Macaranga tanarius* (20, 5%), *Petalostigma pubescens* (2, 5%), *Pogonolobus reticulatus* (2, 5%), *Xanthorrhoea latifolia* subsp. *latifolia* (5%)

### Stratum: S2

Frequent species (cover, frequency): *Alphitonia excelsa* (5, 5%), *Hibiscus heterophyllus* (5, 5%), *Petalostigma triloculare* (2, 5%), *Urena lobata*\* (5, 5%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.2m, 1 site

PFC avg. = 65.0%, 1 site

Dominant species (relative cover, frequency): *Eremochloa bimaculata* (49, 50%), *Glochidion lobocarpum* (23, 50%), *Imperata cylindrica* (23, 50%), *Themeda triandra* (22, 50%), *Melinis minutiflora\** (11, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Alloteropsis semialata* (3, 50%), *Aristida warburgii* (50%), *Arundinella nepalensis* (50%), *Capillipedium spicigerum* (50%), *Chrysopogon fallax* (1, 50%), *Digitaria breviglumis* (2, 50%), *Eragrostis brownii* (3, 50%), *Eremochloa bimaculata* (33, 50%), *Fimbristylis cinnamometorum* (50%), *Fimbristylis dichotoma* (50%), *Heteropogon contortus* (11, 50%), *Heteropogon triticeus* (50%), *Imperata cylindrica* (23, 50%), *Ischaemum australe* var. *villosum* (1, 50%), *Melinis minutiflora\** (11, 50%), *Panicum effusum* (1, 50%), *Paspalidium distans* (4, 50%), *Paspalum scrobiculatum* (50%), *Sorghum* indet. (11, 50%), *Themeda triandra* (15, 50%)

FORBS: *Dianella caerulea* (1, 100%), *Passiflora suberosa\** (1, 100%), *Acacia leptocarpa* (50%), *Adiantum hispidulum* (50%), *Allocasuarina littoralis* (50%), *Alphitonia excelsa* (3, 50%), *Breynia oblongifolia* (50%), *Brunoniella australis* (1, 50%), *Cheilanthes tenuifolia* (50%), *Crotalaria montana* (50%), *Curculigo ensifolia* (50%), *Desmodium* indet. (3, 50%), *Dianella longifolia* (50%), *Glochidion lobocarpum* (23, 50%), *Gonocarpus chinensis* subsp. *verrucosus* (50%), *Hybanthus stellaroides* (50%), *Hypoxis pratensis* var. *pratensis* (50%), *Iphigenia indica* (50%), *Lophostemon suaveolens* (50%), *Melaleuca viridiiflora* var. *viridiiflora* (50%), *Oxalis corniculata\** (50%), *Phyllanthus virgatus* (1, 50%), *Pimelea linifolia* (50%), *Planchonia careya* (50%), *Pleiogynium timorense* (50%), *Podolepis longipedata* (50%), *Pteridium esculentum* (3, 50%), *Rostellularia adscendens* (50%), *Stephania japonica* (3, 50%), *Tricoryne elatior* (50%), *Triumfetta rhomboidea\** (3, 50%), *Xanthorrhoea latifolia* subsp. *latifolia* (50%)

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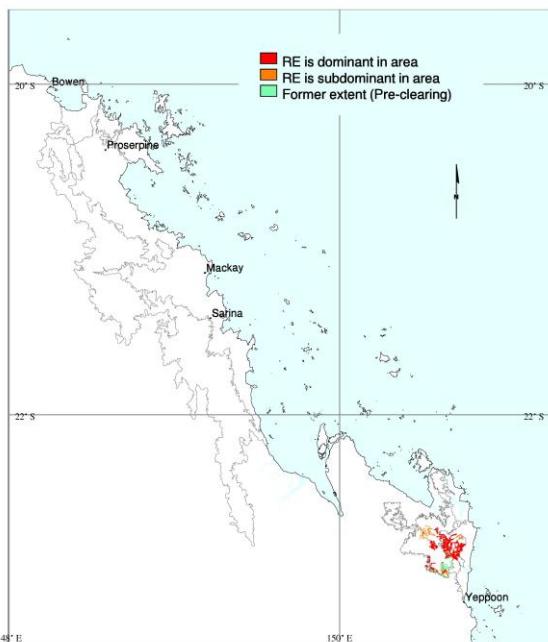
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Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Syncarpia glomulifera and/or Eucalyptus portuensis and/or Corymbia intermedia open-forest on sandy terrace flats and granite outwash**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 11,481 6,788 59%

Species recorded: Total: 130; woody: 49; ground: 93; Avg. spp./site: 48.0; std dev.: 0.0, 1 site(s)

Basal area: Avg./site: 8.0 m<sup>2</sup>/ha, range: 8.0 - 8 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Woodland: 5%; unrecorded: 95%, 20 site(s)

Representative sites: 40894, 44274, 44311, 44313, 44314, 44315, 44316, 44318, 44319, 44554, 44565, 44568, 44569, 44570, 44578, 44581, 44593, 44595, 44631, 44642.

### Stratum: T1

Height avg. = 18.1m, range 12-25m, 20 sites

Crown cover avg. = 15.0%, 1 site

Stem density/ha avg. = 60, 1 site

Dominant species (relative cover, frequency): *Syncarpia glomulifera* (40, 25%), *Syncarpia glomulifera* subsp. *glomulifera* (40, 40%), *Eucalyptus portuensis* (35, 35%), *Corymbia intermedia* (34, 80%), *Lophostemon suaveolens* (26, 40%)

Frequent species (cover, frequency): *Corymbia intermedia* (7, 80%), *Lophostemon suaveolens* (8, 40%), *Syncarpia glomulifera* subsp. *glomulifera* (15, 40%), *Eucalyptus portuensis* (6, 35%), *Syncarpia glomulifera* (11, 25%), *Corymbia trachyploia* (3, 15%), *Eucalyptus latisinensis* (9, 15%), *Eucalyptus platyphylla* (1, 15%), *Lophostemon confertus* (1, 15%), *Allocasuarina torulosa* (8, 10%), *Eucalyptus tereticornis* (7, 10%), *Corymbia gummifera* (6, 5%), *Eucalyptus crebra* (5%), *Eucalyptus exserta* (14, 5%), *Melaleuca leucadendra* (3, 5%)

### Stratum: T2

Height avg. = 8.5m, range 4.5-12m, 20 sites

Crown cover avg. = 56.0%, 1 site

Stem density/ha avg. = 560, 1 site

Dominant species (relative cover, frequency): *Allocasuarina torulosa* (61, 75%), *Allocasuarina littoralis* (53, 25%), *Melaleuca viridiiflora* var. *viridiiflora* (46, 30%), *Lophostemon suaveolens* (25, 25%), *Banksia integrifolia* subsp. *compar* (11, 25%)

Frequent species (cover, frequency): *Allocasuarina torulosa* (16, 75%), *Melaleuca viridiiflora* var. *viridiiflora* (12, 30%), *Allocasuarina littoralis* (11, 25%), *Banksia integrifolia* subsp. *compar* (2, 25%), *Lophostemon suaveolens* (4, 25%), *Acacia flavesens* (4, 15%), *Grevillea banksii* (2, 15%), *Syncarpia glomulifera* (3, 15%), *Acacia leptocarpa* (2, 10%), *Alphitonia excelsa* (4, 10%), *Lophostemon confertus* (6, 10%), *Syncarpia glomulifera* subsp. *glomulifera* (13, 10%), *Acacia leiocalyx* (5, 5%), *Corymbia intermedia* (1, 5%), *Eucalyptus platyphylla* (2, 5%), *Grevillea venusta* (5, 5%), *Planchonia careya* (7, 5%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.8

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### Stratum: T3

Height avg. = 3.0m, range 3-3m, 2 sites

Frequent species (cover, frequency): *Allocasuarina torulosa* (5, 5%)

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### Stratum: S1

Height avg. = 2.1m, range 1.5-3m, 19 sites

Crown cover avg. = 28.0%, 1 site

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (37, 25%), *Grevillea banksii* (30, 35%), *Allocasuarina torulosa* (29, 35%), *Planchonia careya* (23, 25%)

Frequent species (cover, frequency): *Allocasuarina torulosa* (4, 35%), *Grevillea banksii* (6, 35%), *Melaleuca viridiflora* var. *viridiflora* (7, 25%), *Planchonia careya* (3, 25%), *Acacia leptocarpa* (6, 20%), *Banksia integrifolia* subsp. *compar* (2, 20%), *Syncarpia glomulifera* subsp. *glomulifera* (2, 20%), *Acacia flavescens* (8, 15%), *Acacia leiocalyx* (2, 15%), *Lophostemon confertus* (4, 15%), *Allocasuarina littoralis* (15, 10%), *Comesperma indet.* (3, 10%), *Comesperma oblongatum* (2, 10%), *Corymbia intermedia* (2, 10%), *Daviesia umbellulata* (8, 10%), *Grevillea venusta* (2, 10%), *Persoonia virgata* (1, 10%), *Syncarpia glomulifera* (6, 10%), *Acacia aulacocarpa* (5, 5%), *Acacia crassa* subsp. *longicoma* (5, 5%), *Alphitonia excelsa* (1, 5%), *Banksia robur* (20, 5%), *Breynia oblongifolia* (5%), *Bursaria incana* (5%), *Callistemon indet.* (2, 5%), *Ficus congesta* (5%), *Ficus opposita* (1, 5%), *Jacksonia scoparia* (5, 5%), *Lantana camara*\* (22, 5%), *Leptospermum polygalifolium* (5, 5%), *Lophostemon suaveolens* (2, 5%), *Melastoma malabathricum* subsp. *malabathricum* (2, 5%), *Niemeyera antilogia* (2, 5%), *Passiflora suberosa*\* (10, 5%), *Petalostigma triloculare* (5%), *Polygonolobus reticulatus* (5, 5%), *Pomaderris ferruginea* (5, 5%), *Pomaderris indet.* (10, 5%), *Pouteria sericea* (2, 5%), *Rhodomyrtus trineura* (2, 5%)

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### Stratum: G

Height avg. = 1.1m, 1 site

PFC avg. = 76.0%, 1 site

Dominant species (relative cover, frequency): *Themeda triandra* (26, 100%), *Sarga plumosum* (20, 100%), *Imperata cylindrica* (17, 100%), *Heteropogon triticeus* (13, 100%), *Dianella caerulea* (7, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Capillipedium spicigerum* (100%), *Digitaria parviflora* (100%), *Entolasia stricta* (100%), *Eragrostis brownii* (100%), *Eremochloa bimaculata* (100%), *Fimbristylis dichotoma* (100%), *Fimbristylis indet.* (1, 100%), *Heteropogon contortus* (2, 100%), *Heteropogon triticeus* (10, 100%), *Imperata cylindrica* (14, 100%), *Paspalidium distans* (100%), *Sarga plumosum* (16, 100%), *Scleria mackaviensis* (1, 100%), *Themeda triandra* (21, 100%)

FORBS: *Adiantum hispidulum* (100%), *Ageratum houstonianum*\* (100%), *Allocasuarina torulosa* (100%), *Alphitonia excelsa* (3, 100%), *Aster subulatus*\* (100%), *Brunoniella acaulis* (100%), *Cassytha glabella* (100%), *Cheilanthes nitida* (100%), *Conyza bonariensis*\* (100%), *Corymbia intermedia* (1, 100%), *Crotalaria mitchellii* (100%), *Crotalaria montana* (100%), *Cyanthillium cinereum* (100%), *Desmodium gangeticum* (100%), *Dianella caerulea* (5, 100%), *Emilia sonchifolia*\* (100%), *Eustrephus latifolius* (100%), *Flemingia parviflora* (1, 100%), *Glycine tabacina* (100%), *Glycine tomentella* (100%), *Lantana camara*\* (100%), *Lindernia crustacea* (100%), *Lomandra longifolia* (1, 100%), *Lophostemon suaveolens* (100%), *Passiflora suberosa*\* (100%), *Phyllanthus virgatus* (100%), *Planchonia careya* (100%), *Praxelis clematidea*\* (100%), *Pycnospora lutescens* (100%), *Sida cordifolia*\* (100%), *Stylosanthes scabra*\* (100%), *Urena lobata*\* (100%), *Xanthorrhoea latifolia* subsp. *latifolia* (100%)

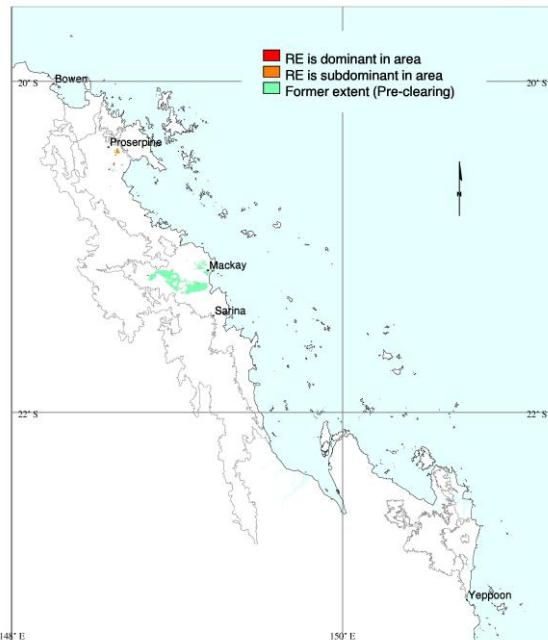
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca viridiflora var. attenuata open-forest in broad drainage areas**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 3,613 205 6%

Species recorded: Total: 45; woody: 4; ground: 42; Avg. spp./site: 24.0; std dev.: 5.7, 3 site(s)

Basal area: Avg./site: 33.3 m<sup>2</sup>/ha, range: 18.0 - 42 m<sup>2</sup>/ha, std. deviation: 11 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Open-forest: 100%, 3 site(s)

Representative sites: 31204, 31244, 31264.

**Stratum: T1**

Height avg. = 12.0m, range 12-12m, 3 sites

Crown cover avg. = 92.7%, range 84.0-98.0%, 3 sites

Stem density/ha avg. = 3844, range 2133-6933, 3 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. attenuata (100, 100%)*

*Frequent species (cover, frequency): Dendrobium canaliculatum (100%), Melaleuca viridiflora var. attenuata (93, 100%), Gymnanthera oblonga (67%), Pandanus cookii (67%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.11

### Stratum: G

Height avg. = 0.5m, range 0.4-0.6m, 3 sites

PFC avg. = 53.7%, range 28-67%, 3 sites

Dominant species (relative cover, frequency): *Urochloa mutica*\* (39, 67%), *Ischaemum rugosum* (32, 33%), *Echinochloa colona*\* (30, 33%), *Utricularia aurea* (16, 67%), *Azolla pinnata* (12, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Cyperus gunnii* subsp. *novaehollandiae* (100%), *Leersia hexandra* (4, 100%), *Urochloa mutica*\* (19, 67%), *Cyperus haspan* subsp. *juncoides* (2, 33%), *Cyperus trinervis* (33%), *Echinochloa colona*\* (20, 33%), *Eleocharis philippensis* (4, 33%), *Fimbristylis dichotoma* (33%), *Fimbristylis littoralis* (1, 33%), *Ischaemum rugosum* (22, 33%), *Panicum paludosum* (33%), *Paspalidium distans* (2, 33%), *Paspalum conjugatum*\* (1, 33%), *Pseudoraphis spinescens* (2, 33%)

FORBS: *Alternanthera denticulata* (1, 100%), *Azolla pinnata* (8, 100%), *Eclipta prostrata* (1, 100%), *Phyllanthus debilis*\* (100%), *Angiosperm* indet. (67%), *Glinus oppositifolius* (1, 67%), *Gymnanthera oblonga* (2, 67%), *Hymenachne amplexicaulis* (67%), *Lemna aequinoctialis* (3, 67%), *Ludwigia peploides* (1, 67%), *Marsilea* indet. (67%), *Ottelia ovalifolia* (67%), *Utricularia aurea* (8, 67%), *Acanthaceae* indet. (1, 33%), *Aeschynomene indica* (33%), *Ageratum conyzoides* subsp. *conyzoides*\* (33%), *Aster subulatus*\* (33%), *Dentella repens* (33%), *Heliotropium indicum*\* (33%), *Lobelia stenophylla* (2, 33%), *Ludwigia octovalvis* (33%), *Oldenlandia galiooides* (33%), *Persicaria attenuata* (33%), *Phyllanthus tenellus*\* (33%), *Phyllanthus virgatus* (33%), *Physalis angulata*\* (33%), *Solanum nodiflorum*\* (33%), *Sonchus oleraceus*\* (33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

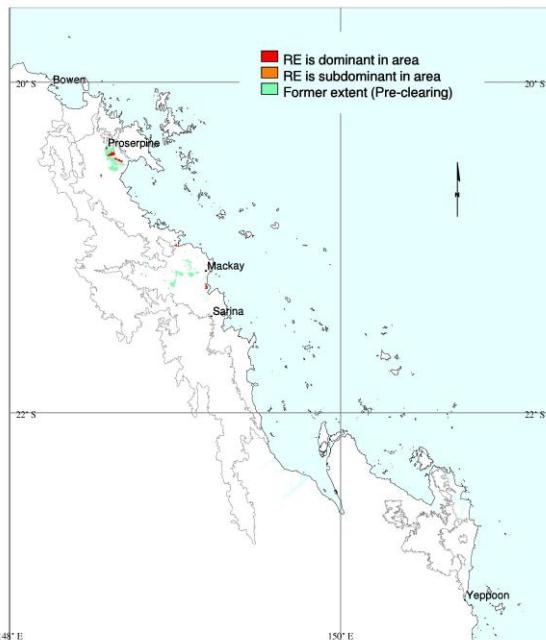
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.12

### **Imperata cylindrica and/or Sorghum nitidum forma aristatum and/or Ischaemum australe tussock grassland on alluvial and old marine plains**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 9,643 1,089 11%

Species recorded: Total: 49; woody: 2; ground: 47; Avg. spp./site: 19.3; std dev.: 6.1, 3 site(s)

Basal area: Avg./site: 0.3 m<sup>2</sup>/ha, range: 0.3 - 0 m<sup>2</sup>/ha, std. deviation: 0 m<sup>2</sup>/ha, 1 site(s)

Structural formation: Closed-tussock grassland: 100%, 4 site(s)

Representative sites: 19926, 36309, 36898, 36899.

#### Stratum: E

Crown cover avg. = 1.0%, 1 site

Stem density/ha avg. = 80, 1 site

Dominant species (relative cover, frequency): *Pandanus cookii* (91, 25%), *Melaleuca leucadendra* (9, 25%)

Frequent species (cover, frequency): *Melaleuca leucadendra* (25%), *Pandanus cookii* (1, 25%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.12

### Stratum: G

Height avg. = 0.8m, range 0.7-0.8m, 2 sites

PFC avg. = 92.7%, range 88-97%, 3 sites

Dominant species (relative cover, frequency): *Sorghum nitidum forma aristatum* (74, 33%), *Imperata cylindrica* (50, 100%), *Ischaemum australe* (17, 67%), *Flemingia lineata* (5, 33%), *Cynodon dactylon* var. *dactylon*\* (5, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (46, 100%), *Cyperus polystachyos* var. *polystachyos* (1, 67%), *Ischaemum australe* (16, 67%), *Bothriochloa decipiens* var. *decipiens* (33%), *Cynodon dactylon* var. *dactylon*\* (4, 33%), *Cyperus flavidus* (4, 33%), *Cyperus scariosus* (1, 33%), *Cyperus victoriensis* (33%), *Dichanthium sericeum* subsp. *humilius* (33%), *Digitaria violascens*\* (1, 33%), *Eriochloa procera* (33%), *Fimbristylis cinnamometorum* (33%), *Fimbristylis ferruginea* (33%), *Ischaemum australe* var. *australe* (4, 33%), *Leersia hexandra* (1, 33%), *Panicum indet.* (33%), *Paspalum notatum*\* (33%), *Setaria pumila* subsp. *pallidefusca*\* (33%), *Sorghum nitidum forma aristatum* (70, 33%), *Sporobolus virginicus* (33%), *Themeda quadrivalvis*\* (33%)

FORBS: *Centella asiatica* (1, 100%), *Mimosa pudica*\* (2, 100%), *Aster subulatus*\* (1, 67%), *Acemella grandiflora* var. *brachyglossa* (1, 33%), *Alysicarpus vaginalis*\* (1, 33%), *Angiosperm indet.* (33%), *Asclepias curassavica*\* (33%), *Brunoniella australis* (33%), *Chamaecrista mimosoides* (1, 33%), *Chamaesyce hyssopifolia*\* (1, 33%), *Desmodium heterophyllum*\* (33%), *Desmodium triflorum*\* (33%), *Epaltes australis* (33%), *Fabaceae indet.* (1, 33%), *Flemingia lineata* (5, 33%), *Glycine tabacina* (1, 33%), *Gymnanthera oblonga* (33%), *Macropitilium lathyroides*\* (33%), *Pandanus indet.* (33%), *Passiflora foetida*\* (33%), *Passiflora suberosa*\* (33%), *Phyla nodiflora* (33%), *Schenkia australis* (33%), *Sida rhombifolia*\* (33%), *Sida spinosa*\* (33%), *Solanum indet.* (33%)

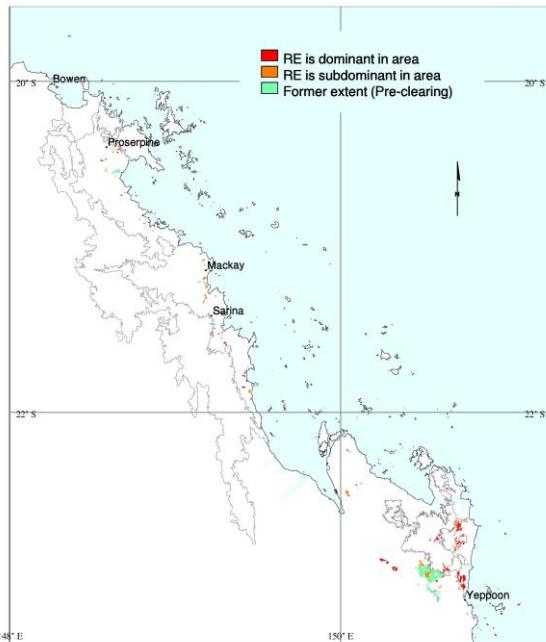
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca quinquenervia and/or M. leucadendra woodland on alluvial plains or marine plains**

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 10,694 4,532 42%

Species recorded: Total: 103; woody: 27; ground: 87; Avg. spp./site: 35.7; std dev.: 5.9, 3 site(s)

Basal area: Avg./site: 27.3 m<sup>2</sup>/ha, range: 9.5 - 39 m<sup>2</sup>/ha, std. deviation: 12 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Open-forest: 43%; woodland: 14%; unrecorded: 43%, 7 site(s)

Representative sites: 17516, 19476, 19938, 19948, 44179, 44583, 44641.

**Stratum: T1**

Height avg. = 15.7m, range 11-25m, 7 sites

Crown cover avg. = 72.0%, range 54.0-94.0%, 4 sites

Stem density/ha avg. = 880, range 760-1040, 3 sites

*Dominant species (relative cover, frequency): Melaleuca leucadendra (100, 29%), Melaleuca quinquenervia (84, 71%), Eucalyptus tereticornis (15, 29%), Lophostemon suaveolens (12, 43%), Melaleuca viridiflora var. viridiflora (4, 29%)*

*Frequent species (cover, frequency): Melaleuca quinquenervia (47, 71%), Lophostemon suaveolens (3, 43%), Eucalyptus tereticornis (6, 29%), Melaleuca leucadendra (72, 29%), Melaleuca viridiflora var. viridiflora (3, 29%), Corymbia intermedia (2, 14%)*

**Stratum: T2**

Height avg. = 6.3m, range 3-10m, 6 sites

Crown cover avg. = 1.7%, range 0.0-3.0%, 3 sites

Stem density/ha avg. = 120, 1 site

*Dominant species (relative cover, frequency): Melaleuca quinquenervia (74, 57%), Melaleuca viridiflora var. viridiflora (52, 29%)*

*Frequent species (cover, frequency): Melaleuca quinquenervia (3, 57%), Melaleuca viridiflora var. viridiflora (10, 29%), Acacia leptocarpa (14%), Allocasuarina littoralis (10, 14%), Eucalyptus platyphylla (14%), Ficus congesta var. congesta (14%), Glochidion sumatranum (14%), Lophostemon suaveolens (2, 14%), Syncarpia glomulifera subsp. glomulifera (2, 14%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.13a

### Stratum: S1

Height avg. = 1.3m, range 0.5-2m, 4 sites

Crown cover avg. = 1.0%, range 0.0-2.0%, 2 sites

Stem density/ha avg. = 580, range 240-920, 2 sites

Dominant species (relative cover, frequency): *Timonius timon* var. *timon* (29, 29%)

Frequent species (cover, frequency): *Timonius timon* var. *timon* (3, 29%), *Acacia flavescens* (5, 14%), *Breynia oblongifolia* (14%), *Cupaniopsis anacardiooides* (14%), *Glochidion apodogynum* (14%), *Glochidion sumatranum* (14%), *Grevillea banksii* (2, 14%), *Jagera pseudorhus* var. *pseudorhus* (14%), *Lantana camara*\* (14%), *Livistona decora* (14%), *Ludwigia octovalvis* (14%), *Melaleuca leucadendra* (2, 14%), *Melaleuca quinquenervia* (14%), *Melaleuca viridiiflora* var. *viridiiflora* (14%), *Melastoma malabathricum* subsp. *malabathricum* (5, 14%), *Myoporum acuminatum* (14%), *Passiflora foetida*\* (14%), *Phyllanthus debilis*\* (14%), *Stachytarpheta jamaicensis*\* (14%)

### Stratum: G

Height avg. = 0.5m, range 0.3-0.7m, 3 sites

PFC avg. = 47.7%, range 46-51%, 3 sites

Dominant species (relative cover, frequency): *Sorghum nitidum forma aristatum* (34, 33%), *Eremochloa bimaculata* (30, 33%), *Paspalidium distans* (25, 67%), *Ischaemum australe* var. *villosum* (15, 33%), *Leersia hexandra* (15, 33%)

Frequent species (cover, frequency): GRAMINOIDs: *Imperata cylindrica* (3, 100%), *Paspalum scrobiculatum* (6, 100%), *Capillipedium spicigerum* (1, 67%), *Cyperus haspan* subsp. *juncoides* (67%), *Cyperus polystachyos* var. *polystachyos* (2, 67%), *Eragrostis brownii* (67%), *Fimbristylis dichotoma* (67%), *Paspalidium distans* (11, 67%), *Sacciolepis indica* (1, 67%), *Baumea rubiginosa* (1, 33%), *Baumea teretifolia* (4, 33%), *Cyperaceae* indet. (2, 33%), *Eremochloa bimaculata* (15, 33%), *Eulalia aurea* (33%), *Fimbristylis depauperata* (33%), *Fimbristylis schoenoides* (2, 33%), *Fimbristylis tristachya* (33%), *Fuirena umbellata* (4, 33%), *Ischaemum australe* (2, 33%), *Ischaemum australe* var. *villosum* (8, 33%), *Ischaemum fragile* (2, 33%), *Leersia hexandra* (8, 33%), *Lepironia articulata* (3, 33%), *Paspalum conjugatum*\* (33%), *Poaceae* indet. (33%), *Rhynchospora corymbosa* (33%), *Scleria novae-hollandiae* (33%), *Setaria pumila* subsp. *pallidefusca*\* (33%), *Sorghum nitidum forma aristatum* (16, 33%), *Sporobolus fertilis*\* (2, 33%), *Sporobolus virginicus* (33%)

FORBS: *Passiflora foetida*\* (100%), *Acmella grandiflora* var. *brachyglossa* (67%), *Ageratum conyzoides* subsp. *conyzoides*\* (67%), *Centella asiatica* (67%), *Cyanthillium cinereum* (67%), *Emilia sonchifolia*\* (67%), *Epaltes australis* (67%), *Ludwigia octovalvis* (1, 67%), *Melaleuca quinquenervia* (1, 67%), *Oldenlandia subulata* (67%), *Stachytarpheta jamaicensis*\* (67%), *Alphitonia excelsa* (33%), *Breynia oblongifolia* (33%), *Brunoniella australis* (2, 33%), *Cheilanthes tenuifolia* (33%), *Conzya* indet. (33%), *Crinum flaccidum* (33%), *Crotalaria lanceolata* subsp. *lanceolata*\* (33%), *Crotalaria montana* (33%), *Cupaniopsis anacardioides* (33%), *Desmodium heterophyllum*\* (3, 33%), *Dianella longifolia* var. *longifolia* (1, 33%), *Dianella rara* (33%), *Eclipta prostrata* (33%), *Eucalyptus tereticornis* (33%), *Glochidion apodogynum* (33%), *Haloragis heterophylla* (1, 33%), *Hypoxis pratensis* var. *pratensis* (33%), *Lindernia crustacea* (33%), *Livistona decora* (33%), *Lobelia stenophylla* (33%), *Macroptilium lathyroides*\* (33%), *Melaleuca leucadendra* (33%), *Mimosa pudica*\* (33%), *Murdannia graminea* (33%), *Myoporum acuminatum* (33%), *Phyllanthus virgatus* (33%), *Sida acuta*\* (33%), *Sida rhombifolia*\* (33%), *Sida spinosa*\* (33%), *Triumfetta* indet. (33%), *Uraria lagopodioides* (33%), *Urena lobata*\* (33%), *Viola betonicifolia* (33%)

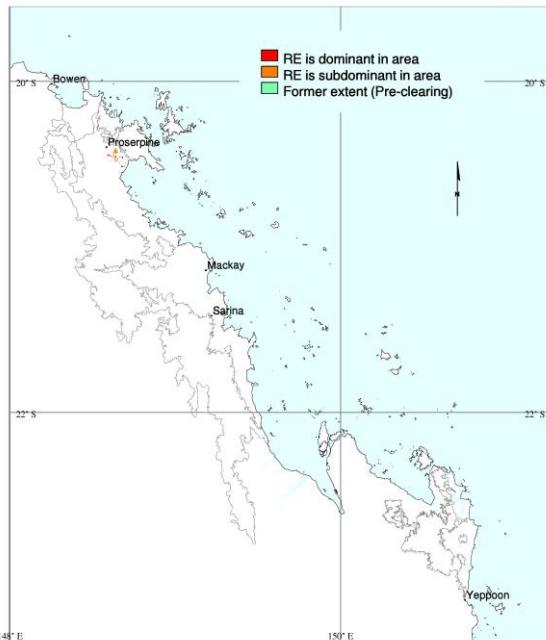
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca dealbata woodland on swampy alluvial or marine plains**

Peter Olden

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 516      327      63%

Species recorded: Total: 61; woody: 8; ground: 56; Avg. spp./site: 44.0; std dev.: 3.0, 2 site(s)

Basal area: Avg./site: 23.8 m<sup>2</sup>/ha, range: 13.5 - 39 m<sup>2</sup>/ha, std. deviation: 11 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Open-forest: 33%; low woodland: 33%; low open-forest: 33%, 3 site(s)

Representative sites: 34385, 34406, 36308.

**Stratum: T1**

Height avg. = 9.2m, range 8.5-10m, 3 sites

Crown cover avg. = 70.3%, range 62.0-76.0%, 3 sites

Stem density/ha avg. = 4027, range 1720-6333, 2 sites

*Dominant species (relative cover, frequency): Melaleuca dealbata (97, 100%), Melaleuca viridiiflora var. viridiiflora (7, 33%), Gymnanthera oblonga (1, 67%)*

*Frequent species (cover, frequency): Dendrobium canaliculatum (100%), Melaleuca dealbata (68, 100%), Gymnanthera oblonga (1, 67%), Corymbia tessellaris (33%), Dendrophthoe glabrescens (33%), Diplatia furcata (33%), Melaleuca viridiiflora var. viridiiflora (5, 33%), Viscum articulatum (33%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.13b

### Stratum: G

Height avg. = 0.4m, range 0.3-0.5m, 2 sites

PFC avg. = 87.5%, range 85-90%, 2 sites

Dominant species (relative cover, frequency): *Paspalidium distans* (53, 100%), *Eleocharis* indet. (11, 50%), *Centrosema molle*\* (11, 100%), *Paspalum conjugatum*\* (6, 100%), *Leersia hexandra* (6, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Bothriochloa bladhii* subsp. *bladhii* (100%), *Cyperus gunnii* subsp. *novaehollandiae* (100%), *Cyperus scariosus* (100%), *Cyperus trinervis* (2, 100%), *Eriochloa meyeriana*\* (100%), *Fimbristylis dichotoma* (100%), *Leersia hexandra* (5, 100%), *Panicum larcomianum* (1, 100%), *Paspalidium distans* (49, 100%), *Paspalum conjugatum*\* (6, 100%), *Paspalum scrobiculatum* (3, 100%), *Sporobolus* indet. (1, 100%), *Vacoparis laxiflorum* (100%), *Capillipedium spicigerum* (50%), *Chrysopogon filipes* (1, 50%), *Cyperus javanicus* (50%), *Echinochloa colona*\* (50%), *Eleocharis* indet. (10, 50%), *Eleocharis philippinensis* (50%), *Eragrostis elongata* (50%), *Eriochloa procera* (50%), *Poaceae* indet. (50%), *Urochloa mutica*\* (1, 50%)

FORBS: *Aeschynomene indica* (100%), *Alternanthera micrantha* (1, 100%), *Cardiospermum halicacabum* var. *halicacabum*\* (1, 100%), *Centella asiatica* (1, 100%), *Centrosema molle*\* (10, 100%), *Commelina diffusa* (100%), *Flemingia lineata* (100%), *Gymnanthera oblonga* (1, 100%), *Melochia corchorifolia* (100%), *Mimosa pudica*\* (2, 100%), *Phyllanthus debilis*\* (100%), *Ruellia tweediana*\* (100%), *Sida spinosa*\* (100%), *Stachytarpheta jamaicensis*\* (100%), *Triumfetta rhomboidea*\* (100%), *Alphitonia excelsa* (50%), *Angiosperm* indet. (50%), *Basilicum polystachyon* (50%), *Corymbia tessellaris* (50%), *Crotalaria quinquefolia* (50%), *Desmodium heterocarpon* var. *strigosum* (50%), *Glochidion lobocarpum* (50%), *Gomphocarpus physocarpus*\* (50%), *Lespedeza juncea* subsp. *sericea* (50%), *Ludwigia octovalvis* (50%), *Macroptilium atropurpureum*\* (2, 50%), *Macroptilium lathyroides*\* (50%), *Marsilea* indet. (3, 50%), *Melaleuca dealbata* (50%), *Passiflora foetida*\* (50%), *Sesbania cannabina* var. *cannabina* (50%)

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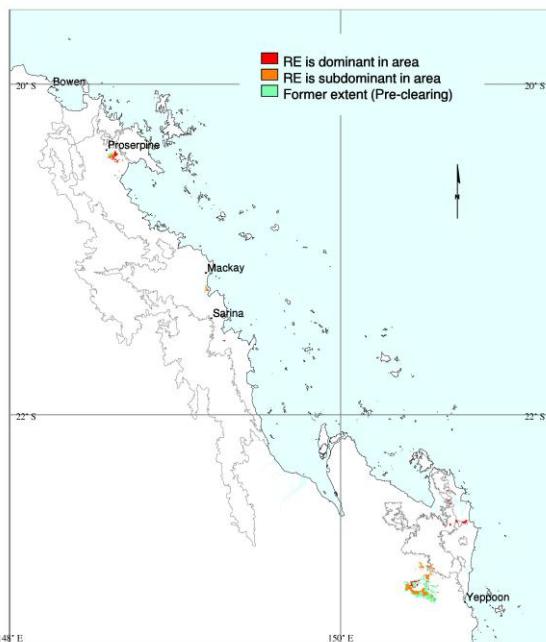
Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Eucalyptus tereticornis and/or Corymbia tessellaris +/- Melaleuca quinquenervia +/- M. dealbata woodland on alluvial plains**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 8,086      2,211      27%

Species recorded: Total: 146; woody: 58; ground: 94; Avg. spp./site: 59.0; std dev.: 0.0, 1 site(s)

Basal area: Avg./site: 12.0 m<sup>2</sup>/ha, range: 7.0 - 15 m<sup>2</sup>/ha, std. deviation: 3 m<sup>2</sup>/ha, 4 site(s)

Structural formation: Open-woodland: 16%; woodland: 5%; unrecorded: 79%, 19 site(s)

Representative sites: 31544, 36305, 36306, 36307, 44355, 44356, 44360, 44362, 44426, 44444, 44542, 44547, 44608, 44680, 44682, 44683, 44699, 44701, 44704.

**Stratum: E**

Height avg. = 18.2m, range 14-24m, 5 sites

Crown cover avg. = 2.0%, 1 site

*Dominant species (relative cover, frequency): Eucalyptus tereticornis (80, 26%)*

*Frequent species (cover, frequency): Eucalyptus tereticornis (9, 26%), Corymbia intermedia (2, 5%), Melaleuca dealbata (1, 5%)*

**Stratum: T1**

Height avg. = 14.7m, range 9-22m, 19 sites

Crown cover avg. = 12.8%, range 7.0-26.0%, 4 sites

Stem density/ha avg. = 67, 1 site

*Dominant species (relative cover, frequency): Eucalyptus tereticornis (77, 42%), Melaleuca quinquenervia (65, 37%), Lophostemon suaveolens (32, 26%), Eucalyptus platyphylla (23, 26%)*

*Frequent species (cover, frequency): Eucalyptus tereticornis (9, 42%), Melaleuca quinquenervia (30, 37%), Eucalyptus platyphylla (4, 26%), Lophostemon suaveolens (13, 26%), Melaleuca dealbata (5, 16%), Corymbia tessellaris (3, 11%), Livistona decora (1, 11%), Melaleuca viridiiflora var. viridiiflora (35, 11%), Acacia crassa subsp. longicoma (5%), Allocasuarina torulosa (2, 5%), Alphitonia excelsa (5%), Chionanthus ramiflora (5%), Cupaniopsis anacardiooides (5%), Dendrophthoe glabrescens (5%), Eucalyptus crebra (1, 5%), Euroschinus falcatus (5%), Jagera pseudorhus var. pseudorhus (10, 5%), Mallotus philippensis (5%), Millettia pinnata (10, 5%), Planchonia careya (1, 5%), Terminalia sericocarpa (5, 5%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.13c

### Stratum: T2

Height avg. = 8.3m, range 3-14m, 13 sites

Crown cover avg. = 40.3%, range 26.0-63.0%, 4 sites

Stem density/ha avg. = 533, 1 site

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (47, 37%), *Livistona decora* (32, 21%), *Eucalyptus tereticornis* (28, 21%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (16, 37%), *Eucalyptus tereticornis* (11, 21%), *Livistona decora* (6, 21%), *Corymbia tessellaris* (11, 16%), *Eucalyptus platyphylla* (4, 16%), *Melaleuca quinquenervia* (12, 16%), *Alphitonia excelsa* (5, 11%), *Cupaniopsis anacardiooides* (11%), *Melaleuca dealbata* (5, 11%), *Timonius timon* var. *timon* (2, 11%), *Acacia crassa* (5, 5%), *Acacia crassa* subsp. *longicoma* (2, 5%), *Acacia disparrima* subsp. *disparrima* (5, 5%), *Acacia flavescentia* (28, 5%), *Allocasuarina littoralis* (20, 5%), *Allocasuarina torulosa* (2, 5%), *Banksia integrifolia* subsp. *compar* (5, 5%), *Chionanthus ramiflora* (5, 5%), *Cryptocarya* indet. (1, 5%), *Cyclophyllum coprosmoides* (5%), *Diospyros geminata* (1, 5%), *Eucalyptus* indet. (2, 5%), *Eucalyptus platyphylla* x *E.tereticornis* (5%), *Flagellaria indica* (5%), *Glochidion lobocarpum* (2, 5%), *Jagera pseudorhus* var. *pseudorhus* (5%), *Lophostemon suaveolens* (2, 5%), *Macaranga involucrata* (5%), *Mallotus philippensis* (5, 5%), *Melaleuca leucadendra* (2, 5%), *Planchonia careya* (2, 5%), *Schefflera actinophylla* (5%), *Scolopia braunii* (50, 5%)

### Stratum: T3

Height avg. = 4.6m, range 2.5-7m, 8 sites

Crown cover avg. = 9.5%, range 1.0-18.0%, 2 sites

Stem density/ha avg. = 1667, 1 site

Dominant species (relative cover, frequency): *Eucalyptus platyphylla* (12, 21%)

Frequent species (cover, frequency): *Eucalyptus platyphylla* (4, 21%), *Eucalyptus tereticornis* (5, 16%), *Planchonia careya* (7, 16%), *Acacia leiocalyx* (15, 11%), *Acacia leptocarpa* (3, 11%), *Livistona decora* (2, 11%), *Melaleuca viridiflora* var. *viridiflora* (20, 11%), *Acacia crassa* subsp. *longicoma* (2, 5%), *Acacia flavescentia* (10, 5%), *Acacia* indet. (10, 5%), *Albizia procera* (5%), *Allocasuarina littoralis* (2, 5%), *Alphitonia excelsa* (5%), *Euroschinus falcatus* (5%), *Glochidion lobocarpum* (2, 5%), *Glochidion sumatranum* (2, 5%), *Grevillea banksii* (20, 5%), *Jagera pseudorhus* var. *pseudorhus* (5%), *Leptospermum neglectum* (5, 5%), *Pityrodia salvifolia* (5, 5%), *Terminalia muelleri* (5%)

### Stratum: S1

Height avg. = 2.3m, range 1-4m, 12 sites

Crown cover avg. = 3.7%, range 2.0-6.0%, 3 sites

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (12, 16%), *Eucalyptus tereticornis* (10, 11%), *Glochidion lobocarpum* (3, 11%), *Lantana camara*\* (2, 11%), *Livistona decora* (13, 11%), *Petalostigma pubescens* (2, 11%), *Planchonia careya* (2, 11%), *Acacia disparrima* subsp. *disparrima* (5, 5%), *Acacia flavescentia* (2, 5%), *Acacia leptocarpa* (1, 5%), *Capparis* indet. (5%), *Chionanthus ramiflora* (2, 5%), *Cupaniopsis anacardiooides* (2, 5%), *Ficus congesta* (2, 5%), *Ficus congesta* var. *congesta* (10, 5%), *Geijera salicifolia* (1, 5%), *Glochidion sumatranum* (5%), *Lithomyrtus obtusa* (5, 5%), *Macaranga* indet. (10, 5%), *Macaranga involucrata* (5, 5%), *Melaleuca quinquenervia* (5, 5%), *Passiflora suberosa*\* (5, 5%), *Tabernaemontana orientalis* (1, 5%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.5m, 1 site

PFC avg. = 69.0%, 1 site

*Dominant species (relative cover, frequency): Ageratum conyzoides subsp. conyzoides\* (27, 100%), Uraria lagopodioides (13, 100%), Heteropogon contortus (10, 100%), Indigofera trifoliata (8, 100%), Stachytarpheta jamaicensis\* (4, 100%)*

*Frequent species (cover, frequency): GRAMINOIDs: Bothriochloa bladhii subsp. bladhii (2, 100%), Capillipedium spicigerum (2, 100%), Eragrostis brownii (2, 100%), Eriochloa procera (1, 100%), Fimbristylis depauperata (100%), Fimbristylis dichotoma (1, 100%), Heteropogon contortus (7, 100%), Ischaemum australe var. australe (100%), Panicum larcomianum (100%), Paspalidium distans (100%), Paspalum scrobiculatum (1, 100%), Setaria surgens (100%), Themeda triandra (100%), Vacoparis laxiflorum (1, 100%)*

*FORBS: Acacia leptocarpa (100%), Aeschynomene indica (1, 100%), Ageratum conyzoides subsp. conyzoides\* (20, 100%), Alphitonia excelsa (100%), Alysicarpus schomburgkii (2, 100%), Centella asiatica (100%), Chamaecrista nomame var. nomame (1, 100%), Chamaesyce vachellii (100%), Commelina diffusa (100%), Crotalaria montana (3, 100%), Cyanthillium cinereum (100%), Desmodium heterocarpon var. strigosum (1, 100%), Desmodium muelleri (100%), Emilia sonchifolia\* (100%), Eustrephus latifolius (100%), Ficus opposita (100%), Flemingia lineata (100%), Gomphocarpus physocarpus\* (100%), Gymnanthera oblonga (1, 100%), Indigofera trifoliata (6, 100%), Lespedeza juncea subsp. sericea (100%), Macroptilium lathyroides\* (2, 100%), Millettia pinnata (100%), Oxalis indet. (100%), Passiflora foetida\* (100%), Phyllanthus debilis\* (1, 100%), Phyllanthus virgatus (100%), Physalis angulata\* (100%), Pratia concolor (100%), Rostellularia adscendens (100%), Sida acuta\* (100%), Sida spinosa\* (1, 100%), Stachytarpheta jamaicensis\* (3, 100%), Triumfetta rhomboidea\* (2, 100%), Uraria lagopodioides (10, 100%), Vigna radiata var. sublobata (100%)*

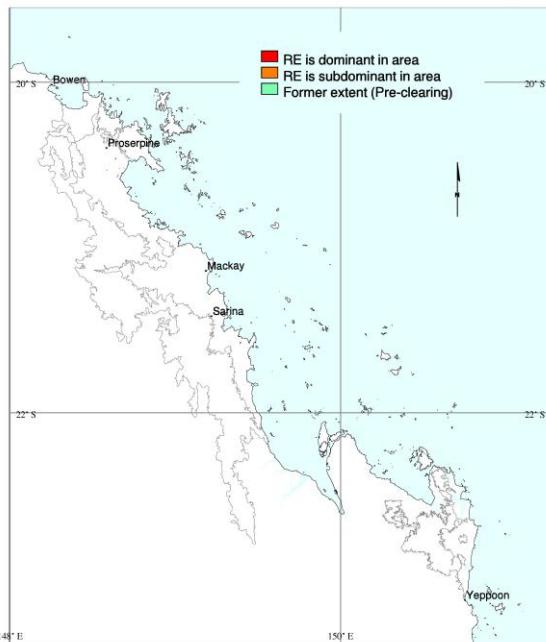
Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Corymbia tessellaris and/or Eucalyptus tereticornis woodland on marine and alluvial plains adjacent to estuarine areas**



Peter Olden

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 113 53 47%

Species recorded: Total: 60; woody: 5; ground: 56; Avg. spp./site: 49.5; std dev.: 2.5, 2 site(s)

Basal area: Avg./site: 9.8 m<sup>2</sup>/ha, range: 7.5 - 12 m<sup>2</sup>/ha, std. deviation: 2 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Woodland: 50%; low woodland: 50%, 2 site(s)

Representative sites: 19953, 34368.

### Stratum: T1

Height avg. = 9.5m, range 9-10m, 2 sites

Crown cover avg. = 37.0%, range 32.0-42.0%, 2 sites

Stem density/ha avg. = 1373, range 880-1867, 2 sites

*Dominant species (relative cover, frequency): Corymbia tessellaris (100, 100%)*

*Frequent species (cover, frequency): Corymbia tessellaris (37, 100%), Dendrobium canaliculatum (50%), Pandanus cookii (50%)*

### Stratum: T2

Height avg. = 3.0m, range 3-3m, 2 sites

Crown cover avg. = 14.0%, range 12.0-16.0%, 2 sites

Stem density/ha avg. = 1847, range 1160-2533, 2 sites

*Dominant species (relative cover, frequency): Corymbia tessellaris (73, 100%), Melaleuca viridiiflora var. viridiiflora (21, 100%), Planchonia careya (13, 50%)*

*Frequent species (cover, frequency): Corymbia tessellaris (10, 100%), Melaleuca viridiiflora var. viridiiflora (3, 100%), Planchonia careya (2, 50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.3.13d

### Stratum: G

Height avg. = 0.6m, range 0.6–0.6m, 2 sites

PFC avg. = 66.5%, range 59–74%, 2 sites

Dominant species (relative cover, frequency): *Paspalidium distans* (18, 100%), *Sorghum nitidum forma aristatum* (17, 100%), *Capillipedium spicigerum* (13, 100%), *Desmodium heterocarpon* var. *strigosum* (6, 100%), *Alysicarpus bupleurifolius*\* (5, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Capillipedium spicigerum* (9, 100%), *Eragrostis brownii* (1, 100%), *Eriochloa procera* (1, 100%), *Fimbristylis dichotoma* (2, 100%), *Fimbristylis miliacea* (2, 100%), *Heteropogon contortus* (3, 100%), *Ischaemum australe* (2, 100%), *Paspalidium distans* (12, 100%), *Scleria novae-hollandiae* (100%), *Setaria surgens* (2, 100%), *Sorghum nitidum forma aristatum* (11, 100%), *Themeda triandra* (1, 100%), *Cyperus cyperoides* (50%), *Cyperus scariosus* (50%), *Panicum larcomianum* (50%), *Paspalum longifolium* (50%), *Paspalum scrobiculatum* (1, 50%), *Sporobolus jacquemontii*\* (50%)

FORBS: *Alysicarpus bupleurifolius*\* (3, 100%), *Alysicarpus vaginalis*\* (100%), *Centella asiatica* (100%), *Centrosema molle*\* (2, 100%), *Chamaecrista nomame* var. *nomame* (2, 100%), *Chamaesyce vachellii* (100%), *Crotalaria lanceolata* subsp. *lanceolata*\* (100%), *Crotalaria montana* (1, 100%), *Cyanthillium cinereum* (100%), *Desmodium heterocarpon* var. *strigosum* (5, 100%), *Desmodium muelleri* (100%), *Emilia sonchifolia*\* (100%), *Flemingia lineata* (3, 100%), *Macroptilium lathyroides*\* (2, 100%), *Mimosa pudica*\* (100%), *Passiflora foetida*\* (100%), *Phyllanthus debilis*\* (1, 100%), *Phyllanthus virgatus* (100%), *Physalis angulata*\* (100%), *Pratia concolor* (100%), *Stachytarpheta jamaicensis*\* (1, 100%), *Triumfetta rhomboidea*\* (100%), *Uraria lagopodioides* (100%), *Vigna radiata* var. *sublobata* (100%), *Ageratum conyzoides* (50%), *Ageratum conyzoides* subsp. *conyzoides*\* (2, 50%), *Albizia procera* (50%), *Alternanthera micrantha* (1, 50%), *Commelina diffusa* (50%), *Dianella longifolia* (50%), *Gomphrena celosioides*\* (50%), *Grewia retusifolia* (50%), *Lindernia crustacea* (50%), *Mecardonia procumbens*\* (50%), *Melochia corchorifolia* (50%), *Planchonia careya* (50%), *Rostellularia adscendens* (50%), *Sida spinosa*\* (50%)

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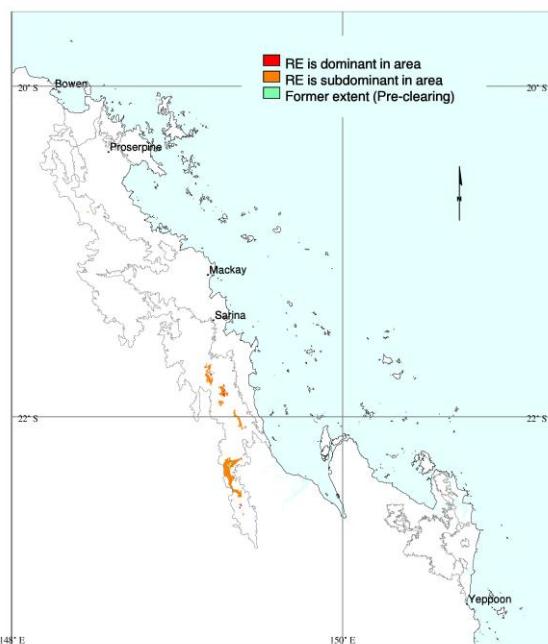
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Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Ischaemum australae and/or Imperata cylindrica and/or Sorghum nitidum forma aristatum tussock grassland on drainage channels in gently undulating upland areas**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 1,149 955 83%

Species recorded: Total: 38; woody: 1; ground: 38; Avg. spp./site: 38.0; std dev.: 0.0, 1 site(s)

Basal area: 0

Structural formation: Closed-tussock grassland: 100%, 1 site(s)

Representative sites: 36186.

**Stratum: E**

Height avg. = 0.8m, 1 site

Crown cover avg. = 4.0%, 1 site

*Dominant species (relative cover, frequency): Gomphocarpus physocarpus\* (100, 100%)*

*Frequent species (cover, frequency): Gomphocarpus physocarpus\* (4, 100%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.4m, 1 site

PFC avg. = 80.0%, 1 site

Dominant species (relative cover, frequency): *Pennisetum alopecuroides* (26, 100%), *Cynodon dactylon* var. *dactylon*\* (14, 100%), *Centella asiatica* (8, 100%), *Ischaemum australe* var. *villosum* (7, 100%), *Eclipta prostrata* (6, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Axonopus compressus*\* (1, 100%), *Bothriochloa bladhii* (4, 100%), *Capillipedium* indet. (100%), *Cynodon dactylon* var. *dactylon*\* (12, 100%), *Cyperaceae* indet. (1, 100%), *Cyperus brevifolius*\* (1, 100%), *Cyperus iria* (100%), *Cyperus polystachyos* var. *polystachyos* (100%), *Echinochloa colona*\* (100%), *Fimbristylis dichotoma* (2, 100%), *Ischaemum australe* var. *villosum* (5, 100%), *Juncus usitatus* (100%), *Paspalum conjugatum*\* (3, 100%), *Paspalum dilatatum*\* (4, 100%), *Paspalum scrobiculatum* (100%), *Pennisetum alopecuroides* (22, 100%), *Setaria sphacelata*\* (100%), *Sorghum nitidum forma aristatum* (4, 100%), *Sporobolus jacquemontii*\* (100%)

FORBS: *Ageratum conyzoides* subsp. *conyzoides*\* (100%), *Alysicarpus bupleurifolius*\* (100%), *Aster subulatus*\* (100%), *Brachyscome basaltica* var. *gracilis* (100%), *Centella asiatica* (7, 100%), *Desmodium triflorum*\* (3, 100%), *Eclipta prostrata* (5, 100%), *Gomphocarpus physocarpus*\* (2, 100%), *Ludwigia octovalvis* (100%), *Mecardonia procumbens*\* (100%), *Mimosa pudica*\* (1, 100%), *Phyllanthus virgatus* (100%), *Polymeria calycina* (100%), *Pratia concolor* (1, 100%), *Ranunculus lappaceus* (1, 100%), *Sida spinosa*\* (100%), *Spermacoce remota*\* (100%), *Urena lobata*\* (2, 100%), *Vigna vexillata* var. *angustifolia* (1, 100%)

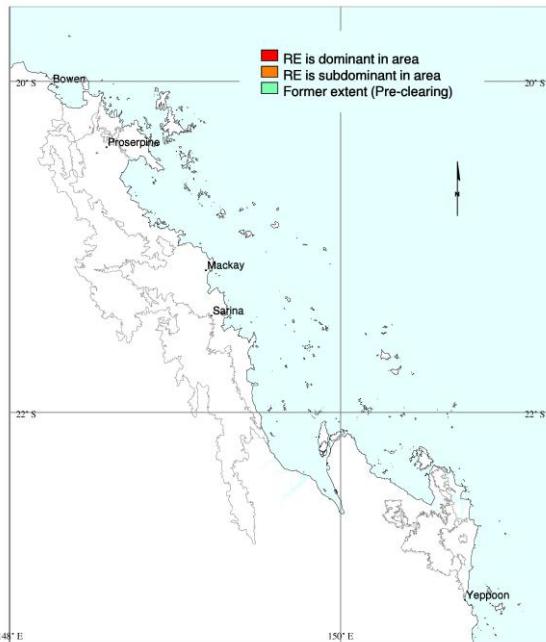
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Corymbia intermedia open-forest on low Tertiary rises (mainly subregion 6)**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 401 96 24%

Species recorded: Total: 91; woody: 18; ground: 75; Avg. spp./site: 68.0; std dev.: 9.0, 2 site(s)

Basal area: Avg./site: 13.5 m<sup>2</sup>/ha, range: 13.0 - 14 m<sup>2</sup>/ha, std. deviation: 1 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Woodland: 50%; open-forest: 50%, 2 site(s)

Representative sites: 31224, 31284.

**Stratum: T1**

Height avg. = 21.0m, range 20-22m, 2 sites

Crown cover avg. = 59.0%, range 54.0-64.0%, 2 sites

Stem density/ha avg. = 483, range 267-700, 2 sites

*Dominant species (relative cover, frequency): Corymbia clarksoniana (49, 100%), Corymbia intermedia (46, 100%), Eucalyptus platyphylla (9, 50%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (27, 100%), Corymbia intermedia (29, 100%), Eucalyptus platyphylla (6, 50%), Melaleuca viridiiflora var. viridiiflora (50%)*

**Stratum: T2**

Height avg. = 7.5m, range 7-8m, 2 sites

Crown cover avg. = 37.0%, range 26.0-48.0%, 2 sites

Stem density/ha avg. = 1667, range 1400-1933, 2 sites

*Dominant species (relative cover, frequency): Melaleuca viridiiflora var. viridiiflora (77, 100%), Corymbia intermedia (18, 100%), Lophostemon confertus (8, 50%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (100%), Corymbia intermedia (7, 100%), Dendrobium canaliculatum (100%), Melaleuca viridiiflora var. viridiiflora (28, 100%), Lophostemon confertus (4, 50%), Parsonsia plaesiophylla (50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.1a

### Stratum: S1

Height avg. = 1.3m, range 1-1.5m, 2 sites

Crown cover avg. = 7.5%, range 5.0-10.0%, 2 sites

Stem density/ha avg. = 950, range 200-1700, 2 sites

Dominant species (relative cover, frequency): *Glochidion lobocarpum* (36, 50%), *Melaleuca viridiiflora* var. *viridiiflora* (32, 100%), *Lophostemon confertus* (28, 50%), *Corymbia clarksoniana* (19, 50%), *Planchonia careya* (19, 100%)

Frequent species (cover, frequency): *Glochidion apodogynum* (100%), *Lantana camara*\* (100%), *Melaleuca viridiiflora* var. *viridiiflora* (3, 100%), *Planchonia careya* (2, 100%), *Acacia leptocarpa* (50%), *Alphitonia excelsa* (50%), *Corymbia clarksoniana* (2, 50%), *Glochidion lobocarpum* (2, 50%), *Helicteres semiglabra* (50%), *Lophostemon confertus* (3, 50%), *Pandanus cookii* (50%), *Persoonia falcata* (50%), *Pogonolobus reticulatus* (50%), *Psydrax* indet. (50%)

### Stratum: G

Height avg. = 0.3m, range 0.3-0.3m, 2 sites

PFC avg. = 42.5%, range 37-48%, 2 sites

Dominant species (relative cover, frequency): *Eriachne triseta* (33, 100%), *Eremochloa bimaculata* (14, 100%), *Mitracarpus hirtus*\* (10, 100%), *Urochloa polyphylla* (5, 50%), *Digitaria longiflora* (4, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Abildgaardia vaginata* (1, 100%), *Chrysopogon fallax* (1, 100%), *Cyperus compressus*\* (100%), *Cyperus sphacelatus*\* (1, 100%), *Dactyloctenium aegyptium*\* (100%), *Eragrostis spartinaoides* (100%), *Eremochloa bimaculata* (7, 100%), *Eriachne triseta* (15, 100%), *Fimbristylis acicularis* (1, 100%), *Paspalidium distans* (1, 100%), *Scleria rugosa* (1, 100%), *Sporobolus jacquemontii*\* (100%), *Alloteropsis semialata* (1, 50%), *Axonopus compressus*\* (50%), *Cyperus leiocaulon* (50%), *Digitaria longiflora* (2, 50%), *Digitaria parviflora* (50%), *Echinochloa colona*\* (50%), *Eleusine indica*\* (50%), *Eragrostis elongata* (50%), *Fimbristylis depauperata* (50%), *Fimbristylis dichotoma* (50%), *Paspalum scrobiculatum* (50%), *Sacciolepis indica* (50%), *Scleria tricuspidata* (50%), *Urochloa polyphylla* (2, 50%)

FORBS: *Ageratum conyzoides* subsp. *conyzoides*\* (100%), *Blumea saxatilis* (100%), *Brunoniella acaulis* (100%), *Cyanthillium cinereum* (100%), *Desmodium pullenii* (2, 100%), *Desmodium rhytidophyllum* (100%), *Desmodium triflorum*\* (2, 100%), *Dianella caerulea* (100%), *Emilia sonchifolia*\* (100%), *Flemingia parviflora* (1, 100%), *Glycine* indet. (1, 100%), *Glycine tomentella* (1, 100%), *Lindernia crustacea* (100%), *Lomandra longifolia* (1, 100%), *Lomandra multiflora* (100%), *Mimosa pudica*\* (1, 100%), *Mitracarpus hirtus*\* (4, 100%), *Murdannia gigantea* (100%), *Parsonsia plaeiophylla* (100%), *Phyllanthus debilis*\* (100%), *Phyllanthus sulcatus* (100%), *Phyllanthus virgatus* (100%), *Sida acuta*\* (100%), *Spermacoce brachystema* (1, 100%), *Stylosanthes humilis*\* (100%), *Triumfetta rhomboidea*\* (100%), *Aeschynomene villosa*\* (50%), *Alysicarpus vaginalis*\* (50%), *Chamaecrista rotundifolia* (50%), *Desmodium trichostachyum* (1, 50%), *Eustrephus latifolius* (50%), *Goodenia pilosa* (50%), *Gymnanthera oblonga* (50%), *Helicteres semiglabra* (50%), *Mitrasacme pygmaea* (50%), *Oldenlandia galiooides* (50%), *Passiflora foetida*\* (50%), *Passiflora suberosa*\* (50%), *Poranthera microphylla* (50%), *Praxelis clematidea*\* (50%), *Pycnospora lutescens* (50%), *Richardia brasiliensis*\* (50%), *Sida cordifolia*\* (50%), *Stachytarpheta jamaicensis*\* (50%), *Stylosanthes scabra*\* (50%), *Synedrella nodiflora*\* (50%), *Tephrosia juncea* (50%), *Xanthorrhoea johnsonii* (50%), *Zornia floribunda* (50%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

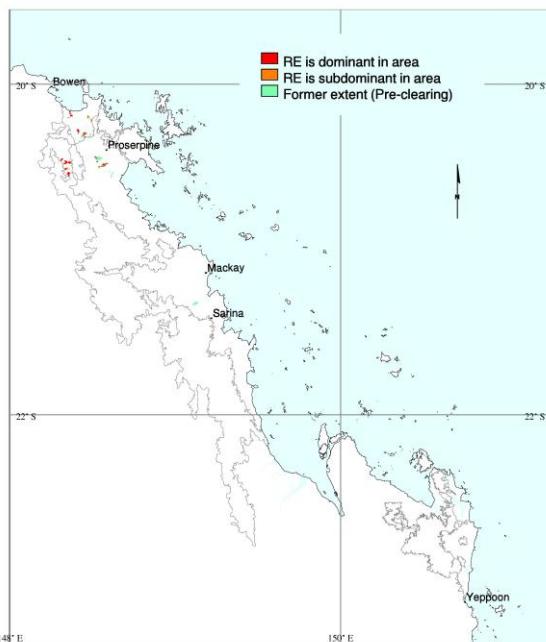
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

Regional ecosystem: 8.5.1b

### **Corymbia clarksoniana open-forest +/- Melaleuca viridiflora on low rises on undulating Tertiary sand plains (mainly subregion 6)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 4,490      1,429      32%

Species recorded: Total: 133; woody: 16; ground: 126; Avg. spp./site: 70.0; std dev.: 12.8, 3 site(s)

Basal area: Avg./site: 21.3 m<sup>2</sup>/ha, range: 14.0 - 25 m<sup>2</sup>/ha, std. deviation: 5 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Woodland: 67%; open-forest: 33%, 3 site(s)

Representative sites: 33304, 33364, 36104.

#### Stratum: T1

Height avg. = 16.5m, range 15.5-17.5m, 3 sites

Crown cover avg. = 41.0%, range 20.0-65.0%, 3 sites

Stem density/ha avg. = 258, range 40-400, 3 sites

*Dominant species (relative cover, frequency): Corymbia clarksoniana (64, 100%), Eucalyptus platyphylla (36, 100%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (30, 100%), Eucalyptus platyphylla (11, 100%)*

#### Stratum: T2

Height avg. = 8.7m, range 7-12m, 3 sites

Crown cover avg. = 38.0%, range 10.0-68.0%, 3 sites

Stem density/ha avg. = 1218, range 120-2600, 3 sites

*Dominant species (relative cover, frequency): Melaleuca nervosa (48, 67%), Melaleuca viridiflora var. viridiflora (41, 67%), Corymbia clarksoniana (36, 67%), Acacia leptocarpa (34, 33%), Eucalyptus platyphylla (17, 33%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (4, 67%), Melaleuca nervosa (28, 67%), Melaleuca viridiflora var. viridiflora (20, 67%), Acacia leptocarpa (3, 33%), Eucalyptus platyphylla (6, 33%), Planchonia careya (33%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.1b

### Stratum: T3

Height avg. = 4.0m, 1 site

Crown cover avg. = 16.0%, 1 site

Stem density/ha avg. = 1400, 1 site

Dominant species (relative cover, frequency): *Corymbia clarksoniana* (50, 33%), *Acacia leptocarpa* (48, 33%), *Xanthorrhoea johnsonii* (1, 33%), *Planchonia careya* (1, 33%), *Melaleuca viridiiflora* var. *viridiiflora* (1, 33%)

Frequent species (cover, frequency): *Acacia leptocarpa* (8, 33%), *Corymbia clarksoniana* (8, 33%), *Melaleuca viridiiflora* var. *viridiiflora* (33%), *Planchonia careya* (33%), *Xanthorrhoea johnsonii* (33%)

### Stratum: S1

Height avg. = 1.5m, range 1-2m, 3 sites

Crown cover avg. = 9.0%, range 8.0-10.0%, 3 sites

Stem density/ha avg. = 2018, range 320-4400, 3 sites

Dominant species (relative cover, frequency): *Acacia leptocarpa* (32, 33%), *Melaleuca nervosa* (29, 67%), *Planchonia careya* (29, 100%), *Xanthorrhoea johnsonii* (21, 33%), *Glochidion apodogynum* (18, 67%)

Frequent species (cover, frequency): *Planchonia careya* (3, 100%), *Glochidion apodogynum* (2, 67%), *Lantana camara*\* (2, 67%), *Melaleuca nervosa* (3, 67%), *Melaleuca viridiiflora* var. *viridiiflora* (1, 67%), *Acacia leptocarpa* (3, 33%), *Alphitonia excelsa* (33%), *Clerodendrum floribundum* (33%), *Corymbia clarksoniana* (33%), *Eucalyptus platyphylla* (33%), *Indigofera hirsuta* (33%), *Lophostemon confertus* (33%), *Persoonia falcata* (33%), *Pogonolobus reticulatus* (33%), *Timonius timon* var. *timon* (33%), *Xanthorrhoea johnsonii* (2, 33%)

### Stratum: S2

Height avg. = 0.4m, range 0.2-0.5m, 2 sites

Crown cover avg. = 18.0%, range 10.0-26.0%, 2 sites

Dominant species (relative cover, frequency): *Xanthorrhoea johnsonii* (76, 33%), *Planchonia careya* (32, 67%), *Melaleuca viridiiflora* var. *viridiiflora* (25, 67%), *Acacia leptocarpa* (8, 33%), *Persoonia falcata* (1, 33%)

Frequent species (cover, frequency): *Melaleuca viridiiflora* var. *viridiiflora* (3, 67%), *Planchonia careya* (5, 67%), *Acacia leptocarpa* (2, 33%), *Lantana camara*\* (33%), *Persoonia falcata* (33%), *Pogonolobus reticulatus* (33%), *Xanthorrhoea johnsonii* (20, 33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.1b

### Stratum: G

Height avg. = 0.3m, range 0.3-0.3m, 2 sites

PFC avg. = 52.3%, range 37-73%, 3 sites

Dominant species (relative cover, frequency): *Abildgaardia ovata* (43, 33%), *Xanthorrhoea johnsonii* (39, 33%), *Mitracarpus hirtus*\* (19, 67%), *Eremochloa bimaculata* (15, 100%), *Fimbristylis dichotoma* (9, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Eragrostis brownii* (100%), *Eremochloa bimaculata* (9, 100%), *Paspalidium distans* (100%), *Abildgaardia vaginata* (1, 67%), *Alloteropsis semialata* (67%), *Aristida acuta* (2, 67%), *Chrysopogon fallax* (3, 67%), *Digitaria parviflora* (67%), *Eragrostis spartinaeoides* (67%), *Eriachne rara* (67%), *Fimbristylis dichotoma* (5, 67%), *Heteropogon contortus* (3, 67%), *Heteropogon triticeus* (67%), *Mnesitheia formosa* (1, 67%), *Mnesitheia rottboellioides* (67%), *Panicum seminudum* var. *cairnsianum* (67%), *Pseudopogonatherum contortum* (1, 67%), *Schizachyrium pseudeulalia* (1, 67%), *Setaria surgens* (67%), *Sporobolus indet.* (67%), *Sporobolus jacquemontii*\* (67%), *Themeda quadrivalvis*\* (67%), *Urochloa subquadripara*\* (1, 67%), *Abildgaardia ovata* (18, 33%), *Aristida queenslandica* var. *dissimilis* (33%), *Bulbostylis barbata* (33%), *Cymbopogon indet.* (33%), *Cyperus cuspidatus* (33%), *Cyperus nervulosus* (33%), *Cyperus scaber* (33%), *Digitaria ciliaris*\* (33%), *Eragrostis indet.* (33%), *Eriachne trisetoides* (33%), *Fimbristylis acicularis* (2, 33%), *Fimbristylis indet.* (33%), *Fimbristylis microcarya* (33%), *Imperata cylindrica* (33%), *Melinis repens*\* (33%), *Perotis rara* (33%), *Rhynchospora heterochaeta* (33%), *Schizachyrium fragile* (1, 33%), *Scleria mackaviensis* (33%), *Scleria novae-hollandiae* (33%), *Scleria tricuspidata* (1, 33%), *Themeda triandra* (33%)

FORBS: *Crotalaria montana* (100%), *Cyanthillium cinereum* (100%), *Desmodium pullenii* (2, 100%), *Emilia sonchifolia*\* (100%), *Flemingia parviflora* (1, 100%), *Galactia tenuiflora* (1, 100%), *Glycine tomentella* (100%), *Lomandra multiflora* (100%), *Mitrasacme pygmaea* (100%), *Spermacoce brachystema* (100%), *Aristolochia thozetii* (67%), *Blumea saxatilis* (67%), *Cajanus reticulatus* (67%), *Cassytha filiformis* (67%), *Chamaecrista absus* (67%), *Corymbia clarksoniana* (67%), *Crotalaria brevis* (67%), *Eustrephus latifolius* (67%), *Hybanthus enneaspermus* (1, 67%), *Iphigenia indica* (67%), *Mitracarpus hirtus*\* (15, 67%), *Oldenlandia galioidea* (67%), *Phyllanthus virgatus* (67%), *Polygonolobus reticulatus* (67%), *Pycnospora lutescens* (67%), *Tephrosia juncea* (67%), *Thecanthes cornucopiae* (67%), *Vigna radiata* var. *sublobata* (67%), *Zornia muriculata* (67%), *Aeschynomene villosa*\* (33%), *Alysicarpus ovalifolius*\* (33%), *Alysicarpus schomburgkii* (33%), *Anagallis pumila* (33%), *Bidens bipinnata*\* (33%), *Bidens pilosa*\* (33%), *Buchnera gracilis* (33%), *Chamaecrista nomame* (33%), *Chamaecrista nomame* var. *nomame* (33%), *Chamaecrista rotundifolia* (4, 33%), *Chlorophytum laxum* (33%), *Commelina lanceolata* (33%), *Crassocephalum crepidioides*\* (33%), *Crotalaria calycina* (33%), *Crotalaria lanceolata* subsp. *lanceolata*\* (33%), *Crotalaria medicaginea* var. *medicaginea* (33%), *Crotalaria mitchellii* subsp. *mitchellii* (33%), *Desmodium filiforme* (2, 33%), *Desmodium heterocarpon* var. *strigosum* (33%), *Desmodium triflorum*\* (33%), *Dianella caerulea* (33%), *Dianella longifolia* (33%), *Eucalyptus platyphylla* (33%), *Geodorum indet.* (33%), *Glochidion apodogynum* (33%), *Goodenia pilosa* (33%), *Indigofera hirsuta* (33%), *Leucas indet.* (33%), *Lindernia crustacea* (33%), *Lomandra filiformis* subsp. *filiformis* (33%), *Lomandra longifolia* (1, 33%), *Melaleuca nervosa* (33%), *Melaleuca viridiiflora* var. *viridiiflora* (33%), *Mitrasacme nummularia* (33%), *Murdannia graminea* (33%), *Murdannia indet.* (33%), *Oldenlandia indet.* (33%), *Phyllanthus simplex* (33%), *Planchonia careya* (33%), *Polygala wightiana* (33%), *Poranthera microphylla* (33%), *Pratia concolor* (1, 33%), *Pseuderanthemum variabile* (33%), *Pterocaulon redolens* (33%), *Rotala occultiflora* (33%), *Stachytarpheta jamaicensis*\* (1, 33%), *Stylosanthes humilis*\* (33%), *Stylosanthes scabra*\* (33%), *Tephrosia filipes* (33%), *Xanthorrhoea johnsonii* (16, 33%), *Zornia dyctiocarpa* var. *filiformis* (33%), *Zornia indet.* (33%)

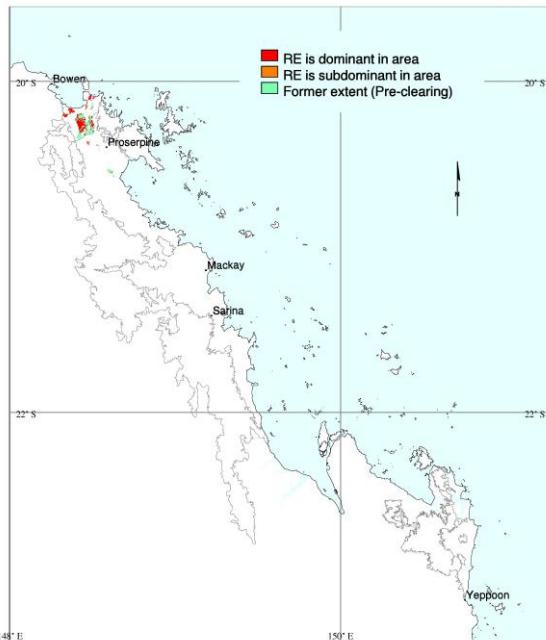
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca viridiflora +/- Allocasuarina luehmannii woodland on Tertiary sand plains**

Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 12,094 3,280 27%

Species recorded: Total: 155; woody: 25; ground: 140; Avg. spp./site: 56.0; std dev.: 5.9, 4 site(s)

Basal area: Avg./site: 13.3 m<sup>2</sup>/ha, range: 3.5 - 18 m<sup>2</sup>/ha, std. deviation: 6 m<sup>2</sup>/ha, 5 site(s)

Structural formation: Low woodland: 50%; low open-forest: 33%; open-forest: 17%, 6 site(s)

Representative sites: 19485, 32464, 32664, 36127, 36226, 36271.

**Stratum: E**

Height avg. = 10.5m, range 8-12m, 4 sites

Crown cover avg. = 3.3%, range 2.0-4.0%, 4 sites

Stem density/ha avg. = 20, 1 site

*Dominant species (relative cover, frequency): Corymbia clarksoniana (78, 67%), Corymbia dallachiana (27, 33%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (3, 67%), Corymbia dallachiana (1, 33%), Eucalyptus drepanophylla (1, 17%), Melaleuca nervosa (17%)*

**Stratum: T1**

Height avg. = 7.7m, range 5-11m, 6 sites

Crown cover avg. = 49.3%, range 30.0-60.0%, 6 sites

Stem density/ha avg. = 885, range 340-1467, 4 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. viridiflora (67, 100%), Corymbia clarksoniana (50, 33%), Acacia julifera subsp. curvinervia (23, 33%)*

*Frequent species (cover, frequency): Melaleuca viridiflora var. viridiflora (33, 100%), Dendrobium canaliculatum (50%), Acacia julifera subsp. curvinervia (14, 33%), Corymbia clarksoniana (24, 33%), Acacia leptocarpa (17%), Allocasuarina littoralis (5, 17%), Allocasuarina luehmannii (12, 17%), Cymbidium canaliculatum (17%), Pandanus indet. (17%), Petalostigma pubescens (6, 17%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.2a

### Stratum: T2

Height avg. = 2.9m, range 1.5-4m, 4 sites

Crown cover avg. = 21.5%, range 4.0-38.0%, 4 sites

Stem density/ha avg. = 1735, range 700-2640, 4 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (57, 67%), *Petalostigma pubescens* (29, 33%), *Acacia julifera* subsp. *curvinervia* (1, 33%), *Planchonia careya* (1, 33%), *Acacia leptocarpa* (1, 50%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (14, 67%), *Acacia leptocarpa* (50%), *Acacia julifera* subsp. *curvinervia* (33%), *Petalostigma pubescens* (5, 33%), *Planchonia careya* (33%), *Allocasuarina littoralis* (6, 17%), *Allocasuarina luehmannii* (14, 17%), *Corymbia clarksoniana* (17%), *Dendrobium canaliculatum* (17%), *Dendrophthoe homoplastica* (17%), *Pandanus cookii* (17%), *Pandanus* indet. (17%), *Xanthorrhoea johnsonii* (17%)

### Stratum: T3

Height avg. = 1.8m, 1 site

Crown cover avg. = 28.0%, 1 site

Stem density/ha avg. = 2060, 1 site

Frequent species (cover, frequency): *Acacia leptocarpa* (17%), *Melaleuca viridiflora* var. *viridiflora* (28, 17%), *Planchonia careya* (17%)

### Stratum: S1

Height avg. = 1.1m, range 0.8-1.5m, 5 sites

Crown cover avg. = 5.4%, range 0.0-12.0%, 5 sites

Stem density/ha avg. = 263, range 60-467, 2 sites

Dominant species (relative cover, frequency): *Acacia leptocarpa* (51, 33%), *Xanthorrhoea johnsonii* (47, 33%), *Melaleuca viridiflora* var. *viridiflora* (36, 33%), *Acacia julifera* subsp. *curvinervia* (34, 33%), *Planchonia careya* (29, 50%)

Frequent species (cover, frequency): *Planchonia careya* (50%), *Acacia julifera* subsp. *curvinervia* (4, 33%), *Acacia leptocarpa* (1, 33%), *Melaleuca viridiflora* var. *viridiflora* (3, 33%), *Petalostigma pubescens* (1, 33%), *Xanthorrhoea johnsonii* (4, 33%), *Allocasuarina littoralis* (1, 17%), *Allocasuarina luehmannii* (17%), *Alphitonia excelsa* (17%), *Clerodendrum floribundum* (17%), *Corymbia clarksoniana* (17%), *Dodonaea lanceolata* var. *subsessilifolia* (1, 17%), *Grevillea parallela* (17%), *Lantana camara*\* (17%), *Melaleuca nervosa* (17%), *Persoonia falcata* (17%), *Pogonolobus reticulatus* (1, 17%), *Psydrax attenuata* (1, 17%)

### Stratum: S2

Height avg. = 0.6m, 1 site

Crown cover avg. = 20.0%, 1 site

Frequent species (cover, frequency): *Grevillea parallela* (17%), *Xanthorrhoea johnsonii* (20, 17%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.2a

### Stratum: G

Height avg. = 0.3m, range 0.25-0.4m, 4 sites

PFC avg. = 46.8%, range 18-87%, 4 sites

Dominant species (relative cover, frequency): *Schizachyrium pseudeulalia* (75, 25%), *Aristida superpendens* (36, 25%), *Eriachne pallescens* var. *pallescens* (33, 50%), *Thaumastochloa* indet. (11, 25%), *Schoenus sparteus* (10, 25%)

Frequent species (cover, frequency): GRAMINOIDs: *Chrysopogon fallax* (3, 100%), *Eremochloa bimaculata* (4, 100%), *Heteropogon contortus* (100%), *Eriachne rara* (75%), *Fimbristylis cinnamometorum* (2, 75%), *Mnesithea formosa* (75%), *Poaceae* indet. (75%), *Aristida warburgii* (3, 50%), *Eragrostis brownii* (50%), *Eriachne mucronata* (50%), *Eriachne pallescens* var. *pallescens* (7, 50%), *Eriachne trisetoides* (3, 50%), *Heteropogon triticeus* (50%), *Schizachyrium fragile* (1, 50%), *Abildgaardia ovata* (1, 25%), *Abildgaardia vaginata* (25%), *Alloteropsis semialata* (25%), *Aristida* indet. (1, 25%), *Aristida queenslandica* var. *queenslandica* (25%), *Aristida superpendens* (17, 25%), *Fimbristylis acuminata* (25%), *Fimbristylis dichotoma* (25%), *Fimbristylis pterygosperma* (25%), *Gahnia aspera* (25%), *Panicum seminudum* var. *cairnsianum* (25%), *Paspalidium distans* (25%), *Rhynchospora heterochaeta* (25%), *Rhynchospora* indet. (25%), *Rhynchospora leae* (25%), *Sacciolepis indica* (25%), *Sarga angustum* (1, 25%), *Sarga plumosum* (2, 25%), *Schizachyrium* indet. (3, 25%), *Schizachyrium pseudeulalia* (67, 25%), *Schoenus sparteus* (2, 25%), *Setaria surgens* (25%), *Sporobolus jacquemontii*\* (25%), *Thaumastochloa* indet. (5, 25%), *Themeda triandra* (25%), *Urochloa subquadripila*\* (25%)

FORBS: *Desmodium trichostachyum* (100%), *Hybanthus enneaspermus* (100%), *Flemingia parviflora* (75%), *Goodenia pilosa* (75%), *Iphigenia indica* (75%), *Phyllanthus virgatus* (75%), *Polygala exsquarrosa* (75%), *Stachytarpheta jamaicensis*\* (1, 75%), *Stylosanthes scabra*\* (75%), *Thecanthes cornucopiae* (75%), *Brunoniella acaulis* (50%), *Buchnera gracilis* (50%), *Byblis liniflora* (50%), *Cassytha filiformis* (1, 50%), *Crotalaria montana* (50%), *Desmodium filiforme* (50%), *Desmodium pullenii* (50%), *Dianella caerulea* (50%), *Dianella longifolia* (50%), *Geodorum densiflorum* (50%), *Hypericum gramineum* (50%), *Lomandra longifolia* (1, 50%), *Mitracerpus hirtus*\* (50%), *Oldenlandia mitrasacmoides* subsp. *trachymenoides* (50%), *Spermacoce brachystema* (50%), *Tephrosia juncea* (50%), *Xanthorrhoea johnsonii* (2, 50%), *Acacia leptocarpa* (25%), *Acacia simsii* (25%), *Aeschynomene villosa*\* (25%), *Ageratum houstonianum*\* (25%), *Alysicarpus vaginalis*\* (25%), *Angiosperm* indet. (25%), *Blumea diffusa* (25%), *Blumea saxatilis* (25%), *Cartonema brachyantherum* (25%), *Cassytha* indet. (25%), *Chamaecrista nomame* var. *nomame* (25%), *Corymbia clarksoniana* (25%), *Crinum flaccidum* (25%), *Crinum* indet. (25%), *Crotalaria brevis* (25%), *Dendrobium canaliculatum* (25%), *Dianella* indet. (25%), *Dianella longifolia* var. *longifolia* (25%), *Drosera burmanni* (25%), *Drosera indica* (25%), *Emilia sonchifolia*\* (25%), *Evolvulus alsinoides* (25%), *Grevillea parallela* (25%), *Habenaria propinquior* (25%), *Heliotropium vagum* (25%), *Hybanthus monopetalus* (25%), *Hypoxis* indet. (25%), *Lantana camara*\* (25%), *Leucas lavandulifolia*\* (25%), *Lindernia crustacea* (25%), *Lomandra multiflora* (25%), *Melaleuca nervosa* (25%), *Melaleuca viridiiflora* var. *viridiiflora* (25%), *Mitrasacme multicaulis* (25%), *Mitrasacme pygmaea* (25%), *Murdannia graminea* (25%), *Oldenlandia galoides* (25%), *Passiflora foetida*\* (25%), *Petalostigma pubescens* (25%), *Phyllanthus* indet. (25%), *Phyllanthus simplex* (25%), *Phyllanthus sulcatus* (25%), *Planchonia careya* (25%), *Polygala longifolia* (25%), *Poranthera microphylla* (1, 25%), *Rostellularia adscendens* (25%), *Sida cordifolia*\* (25%), *Sida spinosa*\* (25%), *Spermacoce multicaulis* (25%), *Stylosanthes humilis*\* (25%), *Stylosanthes* indet. (25%), *Tephrosia leptoclada* (25%), *Thysanotus banksii* (25%), *Thysanotus tuberosus* (25%), *Thysanotus tuberosus* subsp. *tuberosus* (25%), *Triumfetta rhomboidea*\* (25%), *Wahlenbergia caryophylloides* (4, 25%), *Waltheria indica* (25%), *Zornia dyctiocarpa* var. *filifolia* (25%), *Zornia floribunda* (25%), *Zornia* indet. (25%)

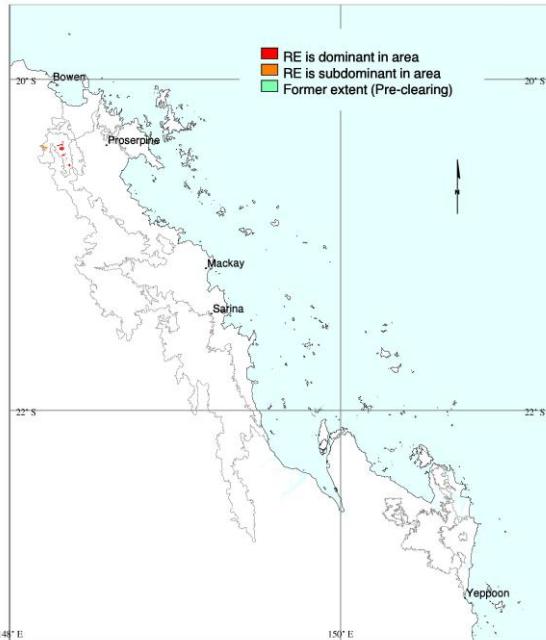
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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca viridiflora and M. nervosa woodland on Tertiary sand plains**

Grant Paterson

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 893 710 80%

Species recorded: Total: 102; woody: 13; ground: 92; Avg. spp./site: 75.0; std dev.: 4.0, 2 site(s)

Basal area: Avg./site: 23.0 m<sup>2</sup>/ha, range: 19.0 - 27 m<sup>2</sup>/ha, std. deviation: 4 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Low woodland: 50%; low open-forest: 50%, 2 site(s)

Representative sites: 32708, 33124.

**Stratum: E**

Height avg. = 15.0m, range 14.5-15.5m, 2 sites

Crown cover avg. = 13.5%, range 3.0-24.0%, 2 sites

Stem density/ha avg. = 67, 1 site

*Dominant species (relative cover, frequency): Corymbia clarksoniana (54, 100%), Eucalyptus platyphylla (46, 100%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (6, 100%), Eucalyptus platyphylla (8, 100%)*

**Stratum: T1**

Height avg. = 7.5m, range 7-8m, 2 sites

Crown cover avg. = 63.0%, range 46.0-80.0%, 2 sites

Stem density/ha avg. = 3900, range 3733-4067, 2 sites

*Dominant species (relative cover, frequency): Melaleuca nervosa (69, 100%), Melaleuca viridiflora var. viridiflora (30, 100%)*

*Frequent species (cover, frequency): Cymbidium canaliculatum (100%), Dendrobium canaliculatum (100%), Melaleuca nervosa (46, 100%), Melaleuca viridiflora var. viridiflora (17, 100%), Corymbia clarksoniana (50%), Petalostigma pubescens (50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.2c

### Stratum: S1

Height avg. = 1.8m, range 1.8-1.8m, 2 sites

Crown cover avg. = 11.5%, range 9.0-14.0%, 2 sites

Stem density/ha avg. = 12033, range 12000-12067, 2 sites

Dominant species (relative cover, frequency): *Lantana camara*\* (73, 100%), *Corymbia clarksoniana* (10, 50%), *Melaleuca viridiflora* var. *viridiflora* (9, 100%), *Melaleuca nervosa* (9, 100%), *Psydrax* indet. (1, 50%)

Frequent species (cover, frequency): *Acacia simsii* (100%), *Lantana camara*\* (9, 100%), *Melaleuca nervosa* (1, 100%), *Melaleuca viridiflora* var. *viridiflora* (1, 100%), *Petalostigma pubescens* (100%), *Planchonia careya* (100%), *Clerodendrum floribundum* (50%), *Corymbia clarksoniana* (1, 50%), *Eucalyptus platyphylla* (50%), *Pogonolobus reticulatus* (50%), *Psydrax* indet. (50%)

### Stratum: G

Height avg. = 0.3m, range 0.2-0.3m, 2 sites

PFC avg. = 50.0%, range 38-62%, 2 sites

Dominant species (relative cover, frequency): *Eremochloa bimaculata* (23, 100%), *Urochloa subquadripala*\* (15, 100%), *Schizachyrium fragile* (11, 100%), *Abildgaardia vaginata* (7, 100%), *Panicum seminudum* var. *cairnsianum* (6, 100%)

Frequent species (cover, frequency): GRAMINOIDs: *Abildgaardia vaginata* (3, 100%), *Aristida acuta* (100%), *Dactyloctenium aegyptium*\* (100%), *Digitaria ciliaris*\* (100%), *Ectrosia leporina* (100%), *Eragrostis brownii* (1, 100%), *Eragrostis spartinaeoides* (100%), *Eremochloa bimaculata* (13, 100%), *Eriachne rara* (100%), *Fimbristylis acicularis* (100%), *Heteropogon contortus* (100%), *Panicum seminudum* var. *cairnsianum* (3, 100%), *Paspalidium distans* (2, 100%), *Schizachyrium fragile* (7, 100%), *Schizachyrium pseudeulalia* (1, 100%), *Scleria pygmaea* (1, 100%), *Setaria surgens* (100%), *Urochloa subquadripala*\* (8, 100%), *Alloteropsis semialata* (50%), *Aristida warburgii* (50%), *Bothriochloa* indet. (50%), *Bothriochloa pertusa*\* (1, 50%), *Chrysopogon fallax* (50%), *Cyperus castaneus* (50%), *Cyperus compressus*\* (50%), *Cyperus fulvus* (50%), *Cyperus nervulosus* (50%), *Digitaria longiflora* (50%), *Digitaria parviflora* (2, 50%), *Elionurus citreus* (50%), *Fimbristylis depauperata* (2, 50%), *Fimbristylis dichotoma* (50%), *Heteropogon triticeus* (50%), *Mnesithea formosa* (50%), *Sacciolepis indica* (50%), *Scleria novae-hollandiae* (50%), *Sporobolus jacquemontii*\* (50%)

FORBS: *Chamaecrista rotundifolia* (2, 100%), *Crotalaria brevis* (100%), *Crotalaria montana* (100%), *Desmodium filiforme* (100%), *Desmodium pullenii* (1, 100%), *Desmodium triflorum*\* (100%), *Flemingia parviflora* (100%), *Glycine tomentella* (100%), *Grewia retusifolia* (100%), *Hybanthus enneaspermus* (100%), *Lantana camara*\* (100%), *Lomandra multiflora* (100%), *Mitracarpus hirtus*\* (3, 100%), *Phyllanthus simplex* (100%), *Poranthera microphylla* (100%), *Sida cordifolia*\* (100%), *Sida rhombifolia*\* (100%), *Spermacoce brachystema* (100%), *Stylosanthes humilis*\* (100%), *Tricoryne anceps* (100%), *Zornia muriculata* (100%), *Alysicarpus ovalifolius*\* (50%), *Alysicarpus schomburgkii* (1, 50%), *Aristolochia thozetii* (50%), *Blumea saxatilis* (50%), *Buchnera gracilis* (50%), *Byblis liniflora* (50%), *Cartonema brachyantherum* (50%), *Crotalaria calycina* (50%), *Crotalaria medicaginea* (50%), *Cyanthillium cinereum* (50%), *Desmodium trichostachyum* (50%), *Dianella caerulea* (50%), *Dianella longifolia* (50%), *Emilia sonchifolia*\* (50%), *Epaltes australis* (50%), *Eriocaulon nanum* (50%), *Galactia tenuiflora* (2, 50%), *Goodenia pilosa* (50%), *Iphigenia indica* (50%), *Ipomoea plebeia* (50%), *Melaleuca nervosa* (50%), *Melaleuca viridiflora* var. *viridiflora* (50%), *Mitrasacme pygmaea* (50%), *Murdannia* indet. (50%), *Pratia concolor* (50%), *Rostellularia adscendens* (50%), *Stachytarpheta jamaicensis*\* (50%), *Stylium eriorhizum* (50%), *Stylosanthes scabra*\* (50%), *Tephrosia filipes* (1, 50%), *Thecanthes cornucopiae* (50%), *Thysanotus* indet. (50%), *Vigna* indet. (50%), *Waltheria indica* (50%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

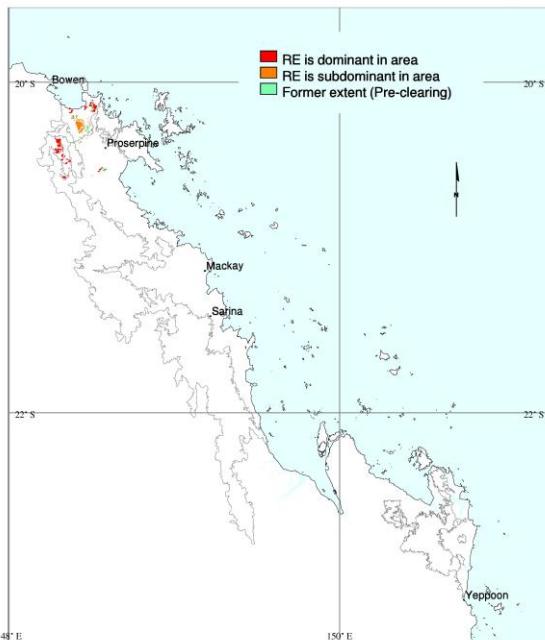
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.3a

### **Eucalyptus drepanophylla +/- Corymbia dallachiana +/- Melaleuca viridiflora woodland, on broad low rises and gently sloping Tertiary sand plains (mainly subregion 6)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 7,707 3,696 48%

Species recorded: Total: 132; woody: 19; ground: 114; Avg. spp./site: 65.3; std dev.: 21.8, 3 site(s)

Basal area: Avg./site: 10.7 m<sup>2</sup>/ha, range: 7.0 - 13 m<sup>2</sup>/ha, std. deviation: 3 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Open-woodland: 33%; open-forest: 33%; closed-forest: 33%, 3 site(s)

Representative sites: 35704, 36144, 36145.

#### Stratum: T1

Height avg. = 17.5m, range 12-20.5m, 3 sites

Crown cover avg. = 63.3%, range 15.0-90.0%, 3 sites

Stem density/ha avg. = 240, range 240-240, 2 sites

Dominant species (relative cover, frequency): *Eucalyptus drepanophylla* (92, 100%), *Corymbia dallachiana* (8, 67%), *Corymbia clarksoniana* (3, 100%)

Frequent species (cover, frequency): *Corymbia clarksoniana* (3, 100%), *Eucalyptus drepanophylla* (59, 100%), *Corymbia dallachiana* (8, 67%)

#### Stratum: T2

Height avg. = 8.0m, range 6-10m, 3 sites

Crown cover avg. = 40.0%, range 33.0-49.0%, 3 sites

Stem density/ha avg. = 507, range 280-720, 3 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (63, 100%), *Eucalyptus drepanophylla* (42, 67%), *Acacia leptocarpa* (11, 67%), *Corymbia clarksoniana* (3, 67%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (27, 100%), *Acacia leptocarpa* (5, 67%), *Corymbia clarksoniana* (1, 67%), *Eucalyptus drepanophylla* (14, 67%), *Corymbia dallachiana* (33%), *Dendrobium canaliculatum* (33%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

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22/11/2012

## Technical Description

## Regional ecosystem: 8.5.3a

### Stratum: T3

Height avg. = 5.3m, range 5-5.5m, 2 sites

Crown cover avg. = 8.0%, range 5.0-11.0%, 2 sites

Stem density/ha avg. = 660, range 440-880, 2 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (63, 67%), *Eucalyptus drepanophylla* (38, 33%), *Planchonia careya* (36, 33%), *Corymbia clarksoniana* (1, 33%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (4, 67%), *Corymbia clarksoniana* (33%), *Eucalyptus drepanophylla* (4, 33%), *Planchonia careya* (4, 33%)

### Stratum: S1

Height avg. = 3.0m, range 2.5-3.5m, 3 sites

Crown cover avg. = 6.7%, range 4.0-11.0%, 3 sites

Stem density/ha avg. = 413, range 320-480, 3 sites

Dominant species (relative cover, frequency): *Acacia leptocarpa* (72, 67%), *Xanthorrhoea johnsonii* (48, 33%), *Acacia leptostachya* (34, 33%), *Xanthorrhoea* indet. (17, 33%), *Melaleuca viridiflora* var. *viridiflora* (16, 100%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (2, 100%), *Acacia leptocarpa* (4, 67%), *Corymbia clarksoniana* (67%), *Acacia julifera* subsp. *curvinervia* (33%), *Acacia leptostachya* (4, 33%), *Acacia simsii* (33%), *Corymbia dallachiana* (33%), *Eucalyptus drepanophylla* (33%), *Euroschinus falcatus* (33%), *Planchonia careya* (33%), *Pogonolobus reticulatus* (33%), *Xanthorrhoea* indet. (2, 33%), *Xanthorrhoea johnsonii* (2, 33%)

### Stratum: S2

Height avg. = 0.9m, range 0.7-1m, 2 sites

Crown cover avg. = 8.5%, range 7.0-10.0%, 2 sites

Stem density/ha avg. = 400, range 160-640, 2 sites

Dominant species (relative cover, frequency): *Xanthorrhoea johnsonii* (67, 33%), *Xanthorrhoea* indet. (49, 33%), *Acacia leptocarpa* (27, 33%), *Acacia leptostachya* (19, 33%), *Melaleuca viridiflora* var. *viridiflora* (10, 67%)

Frequent species (cover, frequency): *Lantana camara*\* (1, 67%), *Melaleuca viridiflora* var. *viridiflora* (1, 67%), *Acacia leptocarpa* (2, 33%), *Acacia leptostachya* (2, 33%), *Acacia simsii* (33%), *Alphitonia excelsa* (33%), *Dodonaea lanceolata* var. *subsessilifolia* (33%), *Petalostigma pubescens* (33%), *Pogonolobus reticulatus* (33%), *Psydrax attenuata* (33%), *Xanthorrhoea* indet. (5, 33%), *Xanthorrhoea johnsonii* (5, 33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Stratum: G**

Height avg. = 0.5m, range 0.4-0.5m, 2 sites

PFC avg. = 25.7%, range 13-33%, 3 sites

*Dominant species (relative cover, frequency): Xanthorrhoea indet. (45, 33%), Stachytarpheta jamaicensis\* (17, 67%), Themeda triandra (15, 33%), Thaumastochloa major (15, 67%), Mnesithea rottboellioides (13, 100%)*

*Frequent species (cover, frequency): GRAMINOIDs: Abildgaardia ovata (100%), Alloteropsis semialata (1, 100%), Aristida utilis var. utilis (100%), Heteropogon triticoides (100%), Mnesithea rottboellioides (5, 100%), Scleria brownii (100%), Aristida indet. (67%), Cyperus scaber (67%), Elionurus citreus (1, 67%), Eragrostis brownii (67%), Eriachne pallescens var. pallescens (67%), Fimbristylis cinnamometorum (67%), Fimbristylis dichotoma (67%), Fimbristylis polytrichoides (1, 67%), Heteropogon contortus (67%), Mnesithea formosa (67%), Thaumastochloa major (3, 67%), Aristida superpendens (2, 33%), Bothriochloa pertusa\* (33%), Chrysopogon fallax (33%), Cyperus aquatilis (33%), Cyperus cristulatus (33%), Cyperus kyllingia\* (33%), Digitaria violascens\* (33%), Ectrosia leporina (33%), Eragrostis indet. (33%), Eragrostis spartinaoides (33%), Eremochloa bimaculata (3, 33%), Eriachne rara (33%), Eriachne trisetoides (1, 33%), Fimbristylis indet. (33%), Fuirena ciliaris (33%), Lipocarpha microcephala (33%), Melinis repens\* (33%), Paspalidium distans (33%), Rhynchospora pterochaeta (33%), Schizachyrium indet. (1, 33%), Scleria indet. (33%), Sporobolus jacquemontii\* (33%), Themeda triandra (5, 33%)*

*FORBS: Desmodium pullenii (100%), Flemingia parviflora (100%), Pycnospora lutescens (100%), Tephrosia filipes (100%), Crotalaria brevis (1, 67%), Crotalaria medicaginea (67%), Crotalaria montana (67%), Desmodium trichostachyum (67%), Evolvulus alsinoides (67%), Glycine cyrtoloba (67%), Glycine tomentella (67%), Hybanthus enneaspermus (67%), Hypericum gramineum (67%), Lomandra longifolia (1, 67%), Murdannia graminea (67%), Phyllanthus virgatus (67%), Spermacoce indet. (67%), Stachytarpheta jamaicensis\* (6, 67%), Stylosanthes indet. (67%), Stylosanthes scabra\* (67%), Tephrosia juncea (67%), Tephrosia leptoclada (67%), Thecanthes cornucopiae (67%), Thysanotus tuberosus (67%), Zornia dyctiocarpa var. filifolia (1, 67%), Alysicarpus vaginalis\* (33%), Bidens bipinnata\* (33%), Blumea saxatilis (33%), Brunoniella acaulis (33%), Buchnera gracilis (33%), Cartonema brachyantherum (33%), Centrolepis exserta (33%), Chamaecrista absus (33%), Commelina lanceolata (33%), Crinum indet. (33%), Crotalaria calycina (33%), Curculigo ensifolia (33%), Cyathillium cinereum (33%), Desmodium filiforme (33%), Desmodium rhytidophyllum (33%), Dianella longifolia (33%), Drosera indica (33%), Emilia sonchifolia\* (33%), Emilia sonchifolia var. sonchifolia\* (33%), Epaltes australis (33%), Galactia tenuiflora (33%), Geodorum densiflorum (33%), Glochidion lobocarpum (33%), Goodenia hirsuta (33%), Lomandra confertifolia (33%), Lomandra filiformis (33%), Lomandra multiflora (33%), Mitracarpus hirtus\* (33%), Mitrasacme brachystemonea (33%), Mitrasacme laricifolia (33%), Murdannia indet. (33%), Oldenlandia mitrasacmoides (33%), Oldenlandia mitrasacmoides subsp. trachymenoides (33%), Phyllanthus indet. (33%), Phyllanthus simplex (33%), Polygala exsquarrosa (33%), Poranthera microphylla (33%), Rostellularia adscendens var. juncea (33%), Sida cordifolia\* (33%), Sida rhombifolia\* (33%), Spermacoce brachystema (33%), Triumfetta rhomboidea\* (33%), Utricularia caerulea (33%), Vigna sp. (Station Creek R.J.Lawn CQ3284) (33%), Wedelia spilanthoides (33%), Xanthorrhoea indet. (16, 33%), Xyris indica (33%), Zornia muriculata subsp. angustata (33%), Zornia muriculata subsp. muriculata (33%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

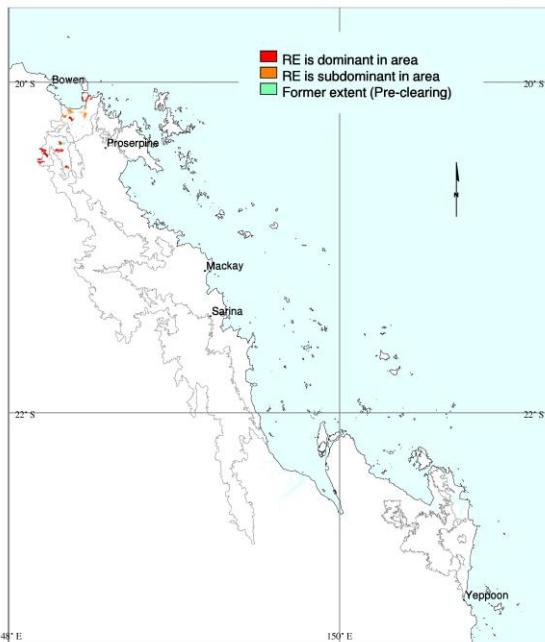
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

Regional ecosystem: 8.5.3b

### **Eucalyptus drepanophylla, Corymbia clarksoniana, E. platyphylla woodland, on sloping, dissected Tertiary plains with alluvial influence (mainly subregion 6)**



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 4,084      2,393      59%

Species recorded: Total: 89; woody: 18; ground: 74; Avg. spp./site: 57.0; std dev.: 2.0, 2 site(s)

Basal area: Avg./site: 4.8 m<sup>2</sup>/ha, range: 4.3 - 5 m<sup>2</sup>/ha, std. deviation: 1 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Woodland: 100%, 2 site(s)

Representative sites: 19486, 19487.

#### Stratum: T1

Height avg. = 13.5m, range 12-15m, 2 sites

Crown cover avg. = 38.0%, range 34.0-42.0%, 2 sites

Stem density/ha avg. = 120, range 80-160, 2 sites

Dominant species (relative cover, frequency): *Eucalyptus platyphylla* (59, 100%), *Eucalyptus drepanophylla* (36, 50%), *Corymbia clarksoniana* (24, 100%)

Frequent species (cover, frequency): *Corymbia clarksoniana* (8, 100%), *Eucalyptus platyphylla* (23, 100%), *Eucalyptus drepanophylla* (15, 50%)

#### Stratum: T2

Height avg. = 7.5m, range 6-9m, 2 sites

Crown cover avg. = 24.5%, range 24.0-25.0%, 2 sites

Stem density/ha avg. = 460, range 320-600, 2 sites

Dominant species (relative cover, frequency): *Petalostigma banksii* (51, 50%), *Melaleuca viridiflora* var. *viridiflora* (47, 50%), *Planchonia careya* (29, 100%), *Acacia julifera* subsp. *curvinervia* (29, 50%), *Eucalyptus platyphylla* (8, 50%)

Frequent species (cover, frequency): *Planchonia careya* (7, 100%), *Acacia julifera* subsp. *curvinervia* (7, 50%), *Corymbia clarksoniana* (50%), *Corymbia dallachiana* (50%), *Eucalyptus platyphylla* (2, 50%), *Melaleuca nervosa* (1, 50%), *Melaleuca viridiflora* var. *viridiflora* (12, 50%), *Pandanus cookii* (50%), *Petalostigma banksii* (13, 50%), *Pogonolobus reticulatus* (50%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.3b

### Stratum: T3

Height avg. = 2.3m, range 1.5-3m, 2 sites

Crown cover avg. = 7.5%, range 1.0-14.0%, 2 sites

Stem density/ha avg. = 2540, range 1080-4000, 2 sites

Dominant species (relative cover, frequency): *Acacia julifera* subsp. *curvinervia* (50, 50%), *Acacia leptocarpa* (46, 100%), *Lantana camara*\* (8, 100%), *Parsonsia plaesiophylla* (5, 50%), *Maytenus disperma* (5, 50%)

Frequent species (cover, frequency): *Acacia leptocarpa* (7, 100%), *Corymbia clarksoniana* (100%), *Lantana camara*\* (1, 100%), *Planchonia careya* (100%), *Acacia julifera* subsp. *curvinervia* (1, 50%), *Acacia leptostachya* (50%), *Claoxylon tenerifolium* (50%), *Eucalyptus drepanophylla* (50%), *Eucalyptus platyphylla* (50%), *Grewia retusifolia* (50%), *Maytenus disperma* (50%), *Melaleuca nervosa* (50%), *Melaleuca viridiflora* var. *viridiflora* (50%), *Parsonsia plaesiophylla* (50%)

### Stratum: G

Height avg. = 0.3m, 1 site

PFC avg. = 57.0%, range 49-65%, 2 sites

Dominant species (relative cover, frequency): *Stachytarpheta jamaicensis*\* (35, 100%), *Aristida queenslandica* var. *dissimilis* (15, 50%), *Aristida warburgii* (13, 100%), *Fimbristylis* indet. (9, 50%), *Eremochloa bimaculata* (9, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Alloteropsis semialata* (100%), *Aristida warburgii* (8, 100%), *Chrysopogon fallax* (1, 100%), *Eragrostis brownii* (100%), *Heteropogon contortus* (4, 100%), *Heteropogon triticeus* (1, 100%), *Mnesithea rotboellioides* (3, 100%), *Setaria surgens* (100%), *Aristida holathera* var. *holathera* (50%), *Aristida personata* (50%), *Aristida queenslandica* var. *dissimilis* (10, 50%), *Aristida utilis* var. *utilis* (3, 50%), *Cyperaceae* indet. (50%), *Dichanthium sericeum* subsp. *sericeum* (50%), *Digitaria ciliaris*\* (50%), *Elionurus citreus* (1, 50%), *Eremochloa bimaculata* (5, 50%), *Eriachne trisetoides* (1, 50%), *Fimbristylis* indet. (5, 50%), *Melinis repens*\* (50%), *Mnesithea formosa* (1, 50%), *Panicum effusum* (50%), *Paspalidium* indet. (50%), *Poaceae* indet. (50%), *Sacciolepis indica* (50%), *Schizachyrium fragile* (50%), *Themeda triandra* (1, 50%)

FORBS: *Crotalaria calycina* (100%), *Crotalaria montana* (100%), *Flemingia parviflora* (1, 100%), *Galactia tenuiflora* (1, 100%), *Glycine tomentella* (100%), *Hybanthus enneaspermus* (100%), *Phyllanthus virgatus* (100%), *Sida cordifolia*\* (100%), *Spermacoce brachystema* (100%), *Stachytarpheta jamaicensis*\* (21, 100%), *Tephrosia juncea* (100%), *Acacia bidwillii* (50%), *Aeschynomene villosa*\* (50%), *Alysicarpus bupleurifolius*\* (50%), *Aphyllodium biarticulatum* (50%), *Blumea diffusa* (50%), *Capparis arborea* (50%), *Chamaecrista* indet. (50%), *Crotalaria goreensis*\* (50%), *Crotalaria medicaginea* (50%), *Cyanthillium cinereum* (50%), *Desmodium trichostachyum* (50%), *Dianella caerulea* (1, 50%), *Dianella longifolia* (1, 50%), *Flueggea virosa* (50%), *Helicteres semiglabra* (50%), *Heliotropium peninsulae* (50%), *Hypericum gramineum* (50%), *Indigofera colutea* (50%), *Indigofera hirsuta* (50%), *Lomandra longifolia* (2, 50%), *Macroptilium atropurpureum*\* (50%), *Melaleuca nervosa* (50%), *Oldenlandia galiooides* (50%), *Pandorea pandorana* (50%), *Planchonia careya* (50%), *Polygonolobus reticulatus* (50%), *Pterocaulon redolens* (50%), *Pycnospora lutescens* (50%), *Spermacoce* indet. (50%), *Stylosanthes scabra*\* (50%), *Tephrosia filipes* (50%), *Vigna* indet. (50%), *Wahlenbergia caryophylloides* (50%), *Waltheria indica* (50%), *Xenostegia tridentata* (1, 50%), *Zornia* indet. (50%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

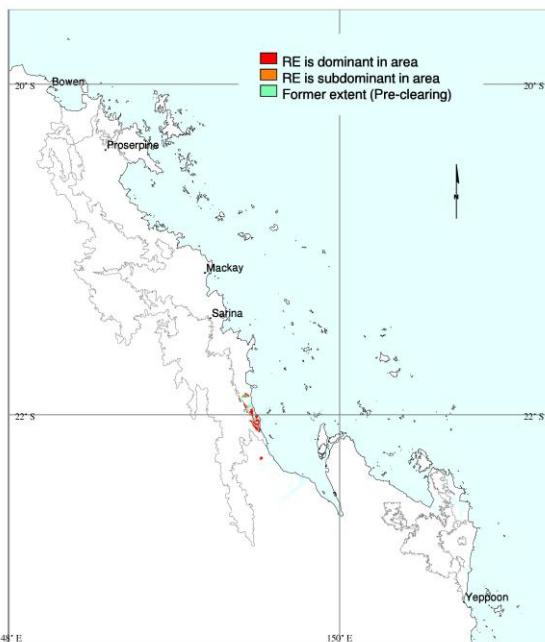
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.5

### Eucalyptus exserta and/or Corymbia clarksoniana and/or E. crebra and/or Melaleuca spp. woodland on Tertiary sand plains



Jeanette Kemp

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 5,353 2,298 43%

Species recorded: Total: 100; woody: 17; ground: 87; Avg. spp./site: 54.3; std dev.: 2.9, 3 site(s)

Basal area: Avg./site: 13.0 m<sup>2</sup>/ha, range: 12.0 - 14 m<sup>2</sup>/ha, std. deviation: 1 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Open-forest: 100%, 3 site(s)

Representative sites: 19951, 19952, 31144.

#### Stratum: T1

Height avg. = 17.8m, range 15-20m, 3 sites

Crown cover avg. = 73.3%, range 68.0-78.0%, 3 sites

Stem density/ha avg. = 222, range 67-520, 3 sites

Dominant species (relative cover, frequency): *Eucalyptus drepanophylla* (50, 100%), *Corymbia clarksoniana* (40, 67%), *Eucalyptus exserta* (35, 67%)

Frequent species (cover, frequency): *Eucalyptus drepanophylla* (36, 100%), *Corymbia clarksoniana* (29, 67%), *Eucalyptus exserta* (27, 67%)

#### Stratum: T2

Height avg. = 6.0m, range 5-7m, 2 sites

Crown cover avg. = 17.0%, range 4.0-28.0%, 3 sites

Stem density/ha avg. = 596, range 267-1120, 3 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (97, 67%), *Corymbia clarksoniana* (28, 67%), *Eucalyptus drepanophylla* (16, 67%), *Eucalyptus exserta* (15, 33%), *Melaleuca nervosa* (2, 33%)

Frequent species (cover, frequency): *Corymbia clarksoniana* (5, 67%), *Corymbia dallachiana* (67%), *Eucalyptus drepanophylla* (3, 67%), *Melaleuca viridiflora* var. *viridiflora* (16, 67%), *Acacia leptocarpa* (33%), *Eucalyptus exserta* (3, 33%), *Melaleuca nervosa* (33%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.5

### Stratum: T3

Crown cover avg. = 7.0%, 1 site

Stem density/ha avg. = 867, 1 site

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (45, 33%), *Acacia leptocarpa* (27, 33%), *Melaleuca nervosa* (24, 33%), *Pogonolobus reticulatus* (1, 33%), *Planchonia careya* (1, 33%)

Frequent species (cover, frequency): *Acacia leptocarpa* (2, 33%), *Eucalyptus drepanophylla* (33%), *Melaleuca nervosa* (2, 33%), *Melaleuca viridiflora* var. *viridiflora* (3, 33%), *Planchonia careya* (33%), *Pogonolobus reticulatus* (33%)

### Stratum: S1

Height avg. = 2.3m, range 1-3.5m, 2 sites

Crown cover avg. = 7.7%, range 0.0-22.0%, 3 sites

Stem density/ha avg. = 2373, range 40-4680, 3 sites

Dominant species (relative cover, frequency): *Petalostigma pubescens* (91, 33%), *Xanthorrhoea johnsonii* (24, 67%), *Planchonia careya* (22, 33%), *Melaleuca viridiflora* var. *viridiflora* (19, 67%), *Ficus opposita* (17, 33%)

Frequent species (cover, frequency): *Acacia leptocarpa* (100%), *Alphitonia excelsa* (67%), *Melaleuca viridiflora* var. *viridiflora* (3, 67%), *Pogonolobus reticulatus* (67%), *Xanthorrhoea johnsonii* (4, 67%), *Alectryon oleifolius* (33%), *Corymbia clarksoniana* (3, 33%), *Eucalyptus exserta* (2, 33%), *Ficus opposita* (33%), *Glochidion apodogynum* (33%), *Jasminum simplicifolium* (33%), *Lantana camara*\* (33%), *Melaleuca nervosa* (33%), *Petalostigma pubescens* (1, 33%), *Planchonia careya* (5, 33%)

### Stratum: S2

Height avg. = 0.7m, 1 site

Crown cover avg. = 8.0%, 1 site

Dominant species (relative cover, frequency): *Xanthorrhoea johnsonii* (88, 33%), *Planchonia careya* (13, 33%)

Frequent species (cover, frequency): *Planchonia careya* (1, 33%), *Xanthorrhoea johnsonii* (7, 33%)

### Stratum: G

Height avg. = 0.3m, range 0.2-0.3m, 2 sites

PFC avg. = 53.3%, range 36-63%, 3 sites

Dominant species (relative cover, frequency): *Xanthorrhoea johnsonii* (20, 67%), *Eremochloa bimaculata* (19, 100%), *Aristida queenslandica* var. *queenslandica* (16, 67%), *Scleria rugosa* (16, 33%), *Schizachyrium fragile* (7, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Alloteropsis semialata* (100%), *Chrysopogon fallax* (4, 100%), *Eragrostis brownii* (2, 100%), *Eremochloa bimaculata* (11, 100%), *Fimbristylis dichotoma* (2, 100%), *Heteropogon contortus* (1, 100%), *Heteropogon triticeus* (100%), *Sporobolus jacquemontii*\* (100%), *Themeda triandra* (2, 100%), *Aristida queenslandica* var. *queenslandica* (9, 67%), *Eriachne pallescens* var. *pallescens* (1, 67%), *Fimbristylis acicularis* (1, 67%), *Fimbristylis depauperata* (67%), *Paspalidium distans* (67%), *Rhynchospora heterochaeta* (4, 67%), *Schizachyrium fragile* (4, 67%), *Abildgaardia ovata* (33%), *Bulbostylis barbata* (2, 33%), *Capillipedium spicigerum* (33%), *Cyperaceae* indet. (33%), *Cyperus compressus*\* (33%), *Cyperus* indet. (33%), *Digitaria ciliaris*\* (33%), *Digitaria eriantha* cv. *Pangola*\* (33%), *Digitaria minima* (1, 33%), *Eriachne rara* (1, 33%), *Fimbristylis cinnamometorum* (1, 33%), *Fimbristylis microcarya* (33%), *Fimbristylis tristachya* (33%), *Fuirena ciliaris* (33%), *Ischaemum australe* var. *villosum* (33%), *Mnesithea formosa* (1, 33%), *Panicum effusum* (33%), *Paspalum scrobiculatum* (33%), *Poaceae* indet. (33%), *Pseudopogonatherum irritans* (33%), *Schizachyrium pseudeulalia* (33%), *Scleria novae-hollandiae* (33%), *Scleria rugosa* (10, 33%), *Scleria tricuspidata* (33%)

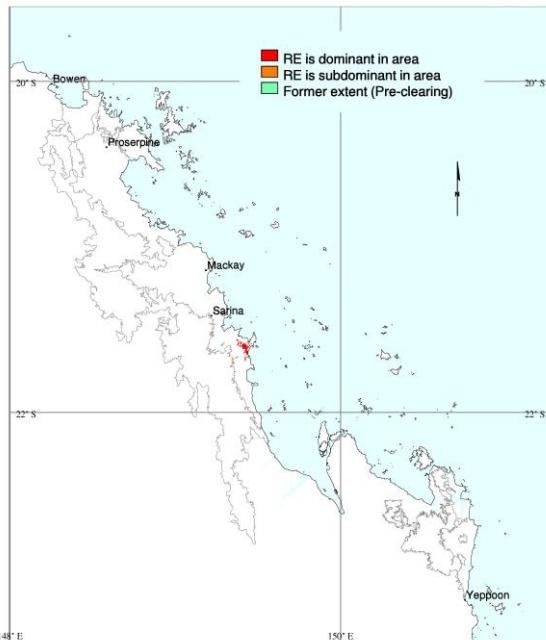
FORBS: *Crotalaria montana* (100%), *Flemingia parviflora* (100%), *Lomandra longifolia* (1, 100%), *Phyllanthus virgatus* (100%), *Spermacoce brachystema* (100%), *Brunoniella acaulis* (67%), *Desmodium pullenii* (2, 67%), *Desmodium rhytidophyllum* (2, 67%), *Dianella caerulea* (67%), *Epaltes australis* (67%), *Peripleura diffusa* (67%), *Rostellularia adscendens* (67%), *Stachytarpheta jamaicensis*\* (67%), *Tephrosia filipes* (67%), *Tephrosia leptoclada* (67%), *Tricoryne anceps* subsp. *anceps* (67%), *Xanthorrhoea johnsonii* (8, 67%), *Angiosperm* indet. (33%), *Blumea saxatilis* (33%), *Breynia oblongifolia* (33%), *Cassytha filiformis* (33%), *Curculigo ensifolia* (33%), *Cyanthillium cinereum* (1, 33%), *Cycas* indet. (33%), *Desmodium heterocarpon* (1, 33%), *Desmodium heterocarpon* var. *strigosum* (33%), *Desmodium* indet. (33%), *Desmodium triflorum*\* (33%), *Dianella nervosa* (33%), *Glycine cyrtoloba* (33%), *Glycine tomentella* (33%), *Indigofera hirsuta* (33%), *Indigofera tryonii* (33%), *Lomandra filiformis* (33%), *Lomandra multiflora* (33%), *Macroptilium lathyroides*\* (33%), *Melaleuca viridiflora* var. *viridiflora* (1, 33%), *Mitrasacme pygmaea* (33%), *Planchonia careya* (33%), *Pogonolobus reticulatus* (33%), *Sida cordifolia*\* (33%), *Stylosanthes guianensis* var. *intermedia*\* (33%), *Stylosanthes scabra*\* (33%), *Thecanthes cornucripiae* (1, 33%), *Tricoryne elatior* (33%), *Zornia floribunda* (33%), *Zornia* indet. (33%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

**Melaleuca viridiflora +/- Allocasuarina littoralis woodland on Tertiary sand plains**

Pre-clearing area (ha), remnant area (ha) and per cent remaining: 2,624 1,581 60%

Species recorded: Total: 33; woody: 5; ground: 30; Avg. spp./site: 20.0; std dev.: 4.0, 2 site(s)

Basal area: Avg./site: 11.0 m<sup>2</sup>/ha, range: 5.0 - 17 m<sup>2</sup>/ha, std. deviation: 6 m<sup>2</sup>/ha, 2 site(s)

Structural formation: Low woodland: 50%; low open-woodland: 50%, 2 site(s)

Representative sites: 34544, 36049.

**Stratum: T1**

Height avg. = 5.5m, range 5-6m, 2 sites

Crown cover avg. = 38.0%, range 37.0-39.0%, 2 sites

Stem density/ha avg. = 1520, range 1000-2040, 2 sites

*Dominant species (relative cover, frequency): Melaleuca viridiflora var. viridiflora (83, 100%), Allocasuarina littoralis (32, 50%)*

*Frequent species (cover, frequency): Acacia leptocarpa (100%), Melaleuca viridiflora var. viridiflora (32, 100%), Allocasuarina littoralis (12, 50%), Corymbia clarksoniana (50%)*

**Stratum: S1**

Height avg. = 2.0m, 1 site

Crown cover avg. = 25.0%, range 10.0-40.0%, 2 sites

Stem density/ha avg. = 6500, range 600-12400, 2 sites

*Dominant species (relative cover, frequency): Allocasuarina littoralis (75, 50%), Melaleuca viridiflora var. viridiflora (61, 100%), Dendrobium canaliculatum (1, 50%), Corymbia clarksoniana (1, 100%)*

*Frequent species (cover, frequency): Corymbia clarksoniana (100%), Melaleuca viridiflora var. viridiflora (10, 100%), Acacia leptocarpa (50%), Allocasuarina littoralis (30, 50%), Dendrobium canaliculatum (50%)*

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.6

### Stratum: G

Height avg. = 0.5m, range 0.5-0.5m, 2 sites

PFC avg. = 77.0%, range 70-84%, 2 sites

Dominant species (relative cover, frequency): *Schoenus sparteus* (44, 50%), *Xanthorrhoea johnsonii* (33, 100%), *Eremochloa bimaculata* (27, 50%), *Eriachne pallescens* var. *pallescens* (14, 100%), *Gonocarpus chinensis* subsp. *verrucosus* (6, 50%)

Frequent species (cover, frequency): GRAMINOIDs: *Eriachne pallescens* var. *pallescens* (12, 100%), *Rhynchospora leae* (2, 100%), *Aristida* indet. (1, 50%), *Chrysopogon fallax* (4, 50%), *Ectrosia leporina* (50%), *Eremochloa bimaculata* (19, 50%), *Eriachne trisetoides* (50%), *Fimbristylis dichotoma* (50%), *Fimbristylis* indet. (50%), *Heteropogon contortus* (1, 50%), *Ischaemum australe* var. *australe* (1, 50%), *Schoenus sparteus* (37, 50%), *Scleria rugosa* (2, 50%)

FORBS: *Cassytha* indet. (1, 100%), *Xanthorrhoea johnsonii* (24, 100%), *Allocasuarina littoralis* (3, 50%), *Brunoniella acaulis* (50%), *Brunoniella* indet. (50%), *Buchnera* indet. (50%), *Dianella longifolia* (50%), *Gonocarpus chinensis* subsp. *verrucosus* (5, 50%), *Goodenia pilosa* (50%), *Lomandra* indet. (50%), *Lomandra longifolia* (50%), *Lomandra multiflora* subsp. *multiflora* (50%), *Melaleuca viridiflora* var. *viridiflora* (5, 50%), *Phyllanthus* indet. (50%), *Phyllanthus virgatus* (50%), *Polygala linariifolia* (50%), *Spermatoce* indet. (50%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

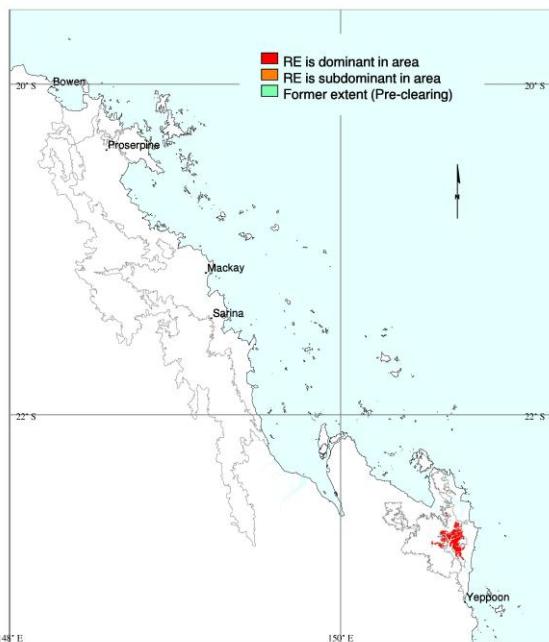
Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.7

### **Melaleuca viridiflora and/or Eucalyptus latisinensis +/- Syncarpia glomulifera woodland on Cainozoic sand plains of uncertain age and origin**



Pre-clearing area (ha), remnant area (ha) and per cent remaining: 7,146 6,459 90%

Species recorded: Total: 112; woody: 26; ground: 97; Avg. spp./site: 24.3; std dev.: 8.3, 3 site(s)

Basal area: Avg./site: 7.2 m<sup>2</sup>/ha, range: 3.0 - 15 m<sup>2</sup>/ha, std. deviation: 6 m<sup>2</sup>/ha, 3 site(s)

Structural formation: Low woodland: 10%; open-woodland: 5%; unrecorded: 86%, 21 site(s)

Representative sites: 40769, 40931, 40932, 44177, 44180, 44184, 44233, 44235, 44304, 44307, 44317, 44399, 44400, 44413, 44543, 44545, 44546, 44563, 44594, 44613, 44633.

#### Stratum: E

Height avg. = 13.8m, range 11-17m, 9 sites

Crown cover avg. = 1.0%, 1 site

Frequent species (cover, frequency): *Eucalyptus latisinensis* (19%), *Syncarpia glomulifera* (14%), *Corymbia intermedia* (5%), *Eucalyptus exserta* (2, 5%)

#### Stratum: T1

Height avg. = 9.4m, range 6-14m, 20 sites

Crown cover avg. = 25.7%, range 10.0-53.0%, 3 sites

Stem density/ha avg. = 168, range 133-230, 3 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (80, 76%), *Eucalyptus latisinensis* (8, 33%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (14, 76%), *Eucalyptus latisinensis* (1, 33%), *Allocasuarina littoralis* (2, 19%), *Allocasuarina torulosa* (17, 14%), *Melaleuca viridiflora* (8, 14%), *Syncarpia glomulifera* (2, 14%), *Acacia* indet. (10%), *Acacia leptocarpa* (1, 10%), *Grevillea banksii* (2, 10%), *Corymbia intermedia* (5%), *Eucalyptus exserta* (4, 5%), *Eucalyptus tereticornis* (4, 5%), *Melaleuca quinquenervia* (9, 5%)

Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

Frequent species: Cover (mean of all values > zero) and frequency (percent of total sites) of all species occurring in more than 5% of sites ordered by decreasing frequency. Ground layer species % (of comprehensive sites) are listed as either graminoid or forb.

Naturalised species have an asterisk (\*) after the name. indet. after listed name = indeterminate species or genus

22/11/2012

## Technical Description

## Regional ecosystem: 8.5.7

### Stratum: T2

Height avg. = 5.3m, range 3-7m, 12 sites

Crown cover avg. = 2.5%, range 1.0-4.0%, 2 sites

Stem density/ha avg. = 188, range 155-220, 2 sites

Dominant species (relative cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (67, 33%), *Allocasuarina littoralis* (34, 29%)

Frequent species (cover, frequency): *Melaleuca viridiflora* var. *viridiflora* (12, 33%), *Allocasuarina littoralis* (4, 29%), *Acacia leptocarpa* (5, 10%), *Allocasuarina torulosa* (5, 10%), *Grevillea banksii* (4, 10%), *Melaleuca viridiflora* (2, 10%), *Banksia robur* (30, 5%), *Corymbia clarksoniana* (1, 5%), *Eucalyptus latisinensis* (2, 5%), *Lophostemon suaveolens* (2, 5%)

### Stratum: T3

Height avg. = 3.7m, range 3-4m, 3 sites

Frequent species (cover, frequency): *Grevillea banksii* (4, 10%), *Melaleuca viridiflora* var. *viridiflora* (20, 10%), *Acacia crassa* subsp. *longicoma* (2, 5%), *Allocasuarina littoralis* (2, 5%)

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### Stratum: S1

Height avg. = 1.6m, range 1-2.5m, 20 sites

Crown cover avg. = 13.7%, range 1.0-20.0%, 3 sites

Stem density/ha avg. = 4794, range 2950-8133, 3 sites

Dominant species (relative cover, frequency): *Banksia robur* (71, 76%), *Leptospermum polygalifolium* (16, 24%), *Allocasuarina littoralis* (15, 24%)

Frequent species (cover, frequency): *Banksia robur* (17, 76%), *Allocasuarina littoralis* (2, 24%), *Leptospermum polygalifolium* (4, 24%), *Grevillea banksii* (2, 19%), *Melaleuca viridiflora* var. *viridiflora* (9, 19%), *Melaleuca viridiflora* (3, 14%), *Acacia leptocarpa* (5, 10%), *Allocasuarina torulosa* (5, 10%), *Comesperma oblongatum* (6, 10%), *Persoonia virgata* (4, 10%), *Acacia indet.* (5, 5%), *Acacia leiocalyx* (2, 5%), *Banksia integrifolia* subsp. *compar* (2, 5%), *Comesperma esulifolium* (5%), *Corymbia clarksoniana* (5%), *Corymbia intermedia* (5%), *Lophostemon suaveolens* (2, 5%), *Melastoma malabathricum* (5%), *Phyllota phylicoides* (2, 5%), *Sprengelia sprengelioides* (2, 5%), *Syncarpia glomulifera* (2, 5%)

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### Stratum: G

Height avg. = 0.6m, range 0.55-0.6m, 3 sites

PFC avg. = 48.7%, range 30-63%, 3 sites

Dominant species (relative cover, frequency): *Xanthorrhoea latifolia* subsp. *latifolia* (48, 33%), *Xanthorrhoea johnsonii* (47, 33%), *Xanthorrhoea fulva* (26, 33%), *Aristida warburgii* (20, 33%), *Fimbristylis cinnamometorum* (19, 67%)

Frequent species (cover, frequency): GRAMINOIDs: *Schoenus brevifolius* (4, 100%), *Fimbristylis cinnamometorum* (10, 67%), *Schoenus calostachyus* (1, 67%), *Schoenus yarrabensis* (4, 67%), *Scleria rugosa* (67%), *Themeda triandra* (2, 67%), *Alloteropsis semialata* (2, 33%), *Aristida warburgii* (6, 33%), *Baumea rubiginosa* (1, 33%), *Bothriochloa bladhii* (1, 33%), *Cyperus eglobosus* (33%), *Entolasia stricta* (6, 33%), *Eremochloa bimaculata* (1, 33%), *Fimbristylis dichotoma* (33%), *Ischaemum australe* var. *villosum* (1, 33%), *Ischaemum fragile* (33%), *Lepidosperma laterale* var. *laterale* (33%), *Scleria mackaviensis* (1, 33%)

FORBS: *Leptospermum polygalifolium* (3, 100%), *Banksia robur* (67%), *Cassytha glabella* (67%), *Drosera peltata* (67%), *Drosera spatulata* (67%), *Gonocarpus chinensis* (67%), *Utricularia caerulea* (67%), *Acacia crassa* (33%), *Baloskion pallens* (33%), *Cassytha glabella* forma *glabella* (33%), *Corymbia trachyploia* (33%), *Dampiera ferruginea* (33%), *Drosera* indet. (33%), *Gompholobium pinnatum* (33%), *Gonocarpus tetragynus* (33%), *Hibbertia* indet. (33%), *Lindernia crustacea* (33%), *Lindsaea ensifolia* (6, 33%), *Melaleuca viridiflora* (33%), *Melastoma malabathricum* (33%), *Mirbelia rubrifolia* (33%), *Mitrasacme paludosa* (33%), *Mitrasacme prolifera* (33%), *Murdannia graminea* (33%), *Pandanus tectorius* (33%), *Pimelea linifolia* (33%), *Pseudanthus orientalis* (33%), *Pseuderanthemum variabile* (33%), *Stackhousia viminea* (33%), *Velleia spathulata* (1, 33%), *Xanthorrhoea fulva* (14, 33%), *Xanthorrhoea johnsonii* (14, 33%), *Xanthorrhoea latifolia* subsp. *latifolia* (29, 33%), *Xyris complanata* (33%)

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Dominant species: Relative cover (mean of cover of species / total cover of all species in that stratum for all values > zero) and frequency (percent of total sites) ordered by decreasing relative abundance. Up to five most dominant species with frequency > 20% listed for each stratum, (only comprehensive sites used for ground stratum).

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