UNESCO Biosphere Nomination for the Sunshine Coast, Australia - Annexes

ANNEX III Sunshine Coast Regional Council Area listed Endangered, Vulnerable and Near Threatened flora and fauna species (May 2017) (source: Sunshine Coast Biodiversity Report, 2016)

ANNEX IV List of main bibliographic references

ANNEX V Sunshine Coast ecosystems - spatial extents, descriptions, species, processes and threats (source: Queensland Government Regional Ecosystems, 2019)

ANNEX VI *Community Strategy 2019–2041*

ANNEX VII *Environment and Liveability Strategy 2017*

ANNEX VIII *Regional Economic Development Strategy 2013–2033*

ANNEX III Sunshine Coast Regional Council Area listed Endangered, Vulnerable and Near Threatened flora and fauna species (May 2017)

This list of rare and threatened flora and fauna species is based on the Biodiversity Report 2016 for the Sunshine Coast Local Government Area and updated in response to the Queensland State Government's reclassification of some listed species.

Existing NCA EVNT species on the Sunshine Coast Council area with a changed conservation status
New NCA EVNT species for the Sunshine Coast Council area

See bottom of document for table acronyms.

Table 1: Sunshine Coast rare and threatened flora and fauna species

							Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**NCA status**	**EPBC status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Occurrence**	**Comments**
animals	amphibians	tusked frog	*Adelotus brevis*	V		C	✓	✓	×	✓	✓	✓	RSC	
animals	amphibians	wallum froglet	*Crinia tinnula*	V		C	✓	✓	✓	✓	✓	×	RSC	
animals	amphibians	Cooloola sedgefrog	*Litoria cooloolensis*	NT		U	undisclosed location						RSC	
animals	amphibians	wallum rocketfrog	*Litoria freycineti*	V		C	✓	✓	×	✓	✓	×	RSC	
animals	amphibians	wallum sedgefrog	*Litoria olongburensis*	V	V	C	✓	✓	×	✓	×	×	RSC	
animals	amphibians	cascade treefrog	*Litoria pearsoniana*	V		C	✓	×	×	×	✓	✓	RSC	
animals	amphibians	Fleay's barred frog	*Mixophyes fleayi*	E	E	C	×	×	×	×	✓	×	RSC	
animals	amphibians	giant barred frog	*Mixophyes iteratus*	E	E	C	✓	✓	×	✓	✓	✓	RSC	
animals	amphibians	southern gastric brooding frog	*Rheobatrachus silus*	PE	EX	C	×	×	×	×	✓	×		
animals	amphibians	southern dayfrog	*Taudactylus diurnus*	PE	EX	U	×	×	×	×	✓	×		
animals	birds	regent honeyeater	*Anthochaera phrygia*	E	CE	U	undisclosed location						OM	
animals	birds	glossy black-cockatoo (eastern)	*Calyptorhynchus lathami*	V		C	✓	✓	✓	✓	✓	✓	RSC	
animals	birds	Coxen's fig-parrot	*Cyclopsitta diophthalma coxeni*	E	E	C	✓	✓	×	×	✓	×		Insufficient knowledge of population & distribution
animals	birds	eastern bristlebird	*Dasyornis brachypterus*	E	E	C	✓	×	×	×	✓	×	RSC	Addition to list since previous, however, possibly locally extinct
animals	birds	wedge-tailed shearwater	*Ardenna pacifica*	V		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	red knot	*Calidris canutus*	E		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	curlew sandpiper	*Calidris ferruginea*	E		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	great knot	*Calidris tenuirostris*	E		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	greater sand plover	*Charadrius leschenaultii*	V		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	lesser sand plover	*Charadrius mongolus*	E		C	✓	✓	✓	✓	×	×	RM	Added May 2017 previously Special LC
animals	birds	wandering albatross	*Diomedea exulans*	V	V	C	✓	×	×	✓	×	×	RV	
animals	birds	red goshawk	*Erythrotriorchis radiatus*	E	V	C	×	×	×	×	✓	×		No recent records in SEQ region
animals	birds	beach stone-curlew	*Esacus magnirostris*	V		C	✓	✓	✓	✓	×	×	RSC	
animals	birds	Grey falcon	*Falco hypoleucos*	V		O	✓	×	✓	×	×	×	RV	NCA status change - previously NT
animals	birds	swift parrot	*Lathamus discolor*	E	CE	U	undisclosed location						OM	EPBC status change - previously E. Non-breeding migrant, rare to this area

							Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**NCA status**	**EPBC status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Occurrence**	**Comments**
animals	birds	southern giant-petrel	*Macronectes giganteus*	E	E	C	×	×	×	✓	×	×	RV	
animals	birds	northern giant-petrel	*Macronectes halli*	V	V	C	×	×	×	✓	×	×	RV	
animals	birds	powerful owl	*Ninox strenua*	V		C	✓	✓	×	✓	✓	✓	RSC	
animals	birds	eastern curlew	*Numenius madagascariensis*	E	CE	C	✓	✓	×	✓	×	×	RM	NCA status change May 2017 - previously V, EPBC status change - previously not listed
animals	birds	ground parrot	*Pezoporus wallicus*	V		C	undisclosed location						RSC	
animals	birds	red-tailed tropicbird	*Phaethon rubricauda*	V		C	×	✓	×	✓	×	×	RM	
animals	birds	plumed frogmouth	*Podargus ocellatus plumiferus*	V		C	✓	✓	×	×	✓	✓	RSC	
animals	birds	Australian painted snipe	*Rostratula australis*	V	E	U	×	✓	×	×	×	×	RM	EPBC status change - previously V
animals	birds	little tern	*Sternula albifrons*	E		C	✓	✓	×	✓	✓	×	RM	
animals	birds	southern emu-wren	*Stipiturus malachurus*	V		C	✓	✓	×	×	✓	×	RSC	
animals	birds	black-breasted button-quail	*Turnix melanogaster*	V	V	C	✓	×	×	×	✓	×	RSC	
animals	bony fish	Mary River cod	*Maccullochella mariensis*		E	C	×	×	×	×	✓	×	RSC	
animals	bony fish	Oxleyan pygmy perch	*Nannoperca oxleyana*	V	E	C	×	×	×	✓	×	×	RSC	
animals	bony fish	Australian lungfish	*Neoceratodus forsteri*		V	U	×	×	×	×	✓	×	RSC	
animals	bony fish	honey blue eye	*Pseudomugil mellis*	V	V	C	×	×	×	✓	×	×	RSC	
animals	insects	Australian fritillary	*Argyreus hyperbius inconstans*	E		U	✓	×	×	✓	×	×	RSC	
animals	insects	Richmond birdwing	*Ornithoptera richmondia*	V		C	✓	✓	×	✓	✓	✓	RSC	
animals	mammals	Greater glider	*Petauroides volans*	V		C	✓	✓	✓	✓	✓	✓	RSC	Added in May 2017 previously LC
animals	mammals	northern quoll	*Dasyurus hallucatus*		E	C	×	×	×	×	✓	×	RSC	Hasn't been recorded locally for some time
animals	mammals	spotted-tailed quoll (southern subspecies)	*Dasyurus maculatus*	V	E	U	undisclosed location						RSC	Hasn't been recorded locally for some time
animals	mammals	dugong	*Dugong dugon*	V		C	✓	✓	×	✓	×	×	RM	
animals	mammals	humpback whale	*Megaptera novaeangliae*	V	V	C	✓	✓	×	✓	×	×	RM	
animals	mammals	eastern long-eared bat	*Nyctophilus corbeni*	V	V	U	undisclosed location							
animals	mammals	koala	*Phascolarctos cinereus*	V	V	C	✓	✓	✓	✓	✓	✓	RSC	
animals	mammals	long-nosed potoroo	*Potorous tridactylus*	V	V	C	✓	×	×	✓	✓	✓	RSC	
animals	mammals	Hastings River mouse	*Pseudomys oralis*	V	E	C	×	×	×	×	✓	×	RSC	
animals	mammals	grey-headed flying-fox	*Pteropus poliocephalus*		V	C	✓	✓	✓	✓	✓	✓	RSC	
animals	mammals	Indo-Pacific humpback dolphin	*Sousa chinensis*	V		U	undisclosed location						RM	NCA status change - previously NT
animals	mammals	Australian humpback dolphin	*Sousa sahulensis*	V		C	undisclosed location						RM	Addition to list since previous list
animals	mammals	water mouse	*Xeromys myoides*	V	V	C	✓	×	×	✓	×	×	RSC	
animals	reptiles	common death adder	*Acanthophis antarcticus*	V		C	✓	✓	×	✓	✓	×	RSC	NCA status change - previously NT
animals	reptiles	striped blind snake	*Anilios silvia*	NT		C	✓	✓	×	×	×	×	RSC	Addition to list since previous list
animals	reptiles	loggerhead turtle	*Caretta caretta*	E	E	C	✓	✓	×	×	×	×	RM	
animals	reptiles	green turtle	*Chelonia mydas*	V	V	C	✓	✓	×	✓	×	×	RM	
animals	reptiles	three-toed snake-tooth skink	*Coeranoscincus reticulatus*		V	C	×	×	×	×	✓	✓	RSC	NCA status change - previously NT

							Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**NCA status**	**EPBC status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Occurrence**	**Comments**
animals	reptiles	southern snapping turtle	*Elseya albagula*	E	CE		×	×	×	×	✓	×	RSC	Addition to list since previous list
animals	reptiles	Mary River turtle	*Elusor macrurus*	E	E	U	×	×	×	×	✓	×	RSC	
animals	reptiles	hawksbill turtle	*Eretmochelys imbricata*	E	V	C	×	✓	×	×	×	×	RM	Added May 2017 previously V
animals	reptiles	flatback turtle	*Natator depressus*	V	V	U	✓	✓	×	×	×	×	RM	
animals	reptiles	Cooloola blind snake / striped blind snake	*Ramphotyphlops silvia / Anilios silvia*	NT		C	✓	✓	×	×	×	×	RSC	
animals	crustaceans		*Tenuibranchiurus glypticus*	E		C	✓	✓	×	✓	×	×		Addition to list since previous list
plants	ferns	slender tree fern	*Cyathea cunninghamii*	NT		U	undisclosed location							
plants	ferns		*Dryopteris wattsii*	V		O	✓	×	×	×	×	✓		*Revwattsia fragilis* (sp.on 2011 list) has been superseded
plants	ferns		*Thelypteris confluens*	V		U	undisclosed location							
plants	higher dicots	whipstick wattle	*Acacia attenuata*	V	V	C	×	✓	×	✓	×	✓		
plants	higher dicots	tiny wattle	*Acacia baueri subsp. baueri*	V		C	✓	✓	×	✓	×	×		
plants	higher dicots	Mt Emu she-oak	*Allocasuarina emuina*	E	E	C	✓	✓	×	×	×	×		
plants	higher dicots	Mt Beerwah she-oak	*Allocasuarina filidens*	V		C	×	×	×	✓	×	✓		NCA status change - previously NT
plants	higher dicots	Mt Coolum she-oak	*Allocasuarina thalassoscopica*	E	E	U	✓	×	×	×	×	×		
plants	higher dicots		*Banksia conferta*	V		C	×	×	×	✓	×	✓		
plants	higher dicots	Mt Coolum bertya	*Bertya sharpeana*	NT		U	✓	×	×	×	×	×		
plants	higher dicots	Wide Bay boronia	*Boronia rivularis*	NT		C	×	✓	×	×	×	×		
plants	higher dicots	Three-leaved Bosistoa	*Bosistoa transversa*		V	C	✓	✓	×	✓	✓	✓		
plants	higher dicots	southern corynocarpus	*Corynocarpus rupestris subsp. arborescens*	V		C	✓	✓	×	×	✓	×		
plants	higher dicots		*Dodonaea rupicola*	V	V	U	×	×	×	✓	×	×		
plants	higher dicots	durringtonia	*Durringtonia paludosa*	NT		C	✓	×	×	×	×	×		
plants	higher dicots	swamp stringybark	*Eucalyptus conglomerata*	E	E	C	✓	✓	×	✓	×	✓		
plants	higher dicots	Plunkett mallee	*Eucalyptus curtisii*	NT		C	×	×	×	✓	×	×		
plants	higher dicots	Mt Beerwah mallee	*Eucalyptus kabiana*	V	V	C	×	×	×	✓	×	✓		
plants	higher dicots	ball nut	*Floydia praealta*	V	V	C	✓	×	×	×	✓	×		
plants	higher dicots		*Gonocarpus effusus*	V		C	×	×	×	✓	×	✓		NCA status change - previously NT
plants	higher dicots	sweet myrtle	*Gossia fragrantissima*	E	E	U	×	✓	×	×	×	×		
plants	higher dicots	angle-stemmed myrtle	*Gossia gonoclada*	E	E	U	undisclosed location							
plants	higher dicots	thready barked myrtle	*Gossia inophloia*	NT		C	✓	✓	×	✓	✓	✓		
plants	higher dicots	reticulated holly	*Graptophyllum reticulatum*	E	E	C	✓	✓	×	×	×	×		
plants	higher dicots	Coochin Hills grevillea	*Grevillea hodgei*	V		C	×	×	×	✓	×	×		
plants	higher dicots	rusty oak	*Helicia ferruginea*	V		C	×	✓	×	×	×	✓		
plants	higher dicots	small-leaved jasmine	*Jasminum jenniae*	E		U	✓	×	×	×	×	×		
plants	higher dicots		*Lenwebbia sp. (Blackall Range P.R.Sharpe 5387)*	E		C	✓	✓	✓	×	✓	×		
plants	higher dicots	fine-leaved tuckeroo	*Lepiderema pulchella*	V		U	×	×	×	×	✓	✓		
plants	higher dicots	Glass House Mountains tea tree	*Leptospermum luehmannii*	V		C	×	×	×	✓	×	✓		
plants	higher dicots		*Leptospermum oreophilum*	V		C	✓	×	×	✓	×	×		
plants	higher dicots		*Leucopogon recurvisepalus*	E		U	×	×	×	✓	×	×		

							Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**NCA status**	**EPBC status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Occurrence**	**Comments**
plants	higher dicots	native lobelia	*Lobelia membranacea*	NT		O	✓	✓	×	×	×	×		
plants	higher dicots	macadamia nut	*Macadamia integrifolia*	V	V	C	✓	✓	×	×	✓	×		
plants	higher dicots	bopple nut	*Macadamia ternifolia*	V	V	C	✓	✓	×	×	✓	✓		
plants	higher dicots	rough-shelled bush nut	*Macadamia tetraphylla*	V	V	C	×	×	×	×	✓	×		
plants	higher dicots		*Mallotus megadontus*	V		C	✓	×	×	×	×	×		Addition to list since previous list
plants	higher dicots	slender milkvine	*Marsdenia coronata*	V		C	✓	✓	✓	✓	✓	×		EPBC status change - previously V
plants	higher dicots	Kingaroy bottlebrush	*Melaleuca formosa*	NT		O	×	×	×	×	✓	×		*Callistemon formosus* (sp.on 2011 list) has been superseded
plants	higher dicots	grove's paperbark	*Melaleuca groveana*	NT		C	×	×	×	✓	×	✓		
plants	higher dicots	corky cucumber	*Nothoalsomitra suberosa*	NT		C	✓	✓	×	×	✓	✓		
plants	higher dicots	large-flowered silkpod	*Parsonsia largiflorens*	E		U	✓	✓	×	×	✓	✓		
plants	higher dicots	slender silkpod	*Parsonsia tenius*	V		C	×	✓	×	×	×	×		
plants	higher dicots	hawkweed	*Picris evae*	V	V	C	×	×	×	×	✓	×		
plants	higher dicots	shiny-leaved condoo	*Planchonella eerwah*	E	E	C	✓	×	×	×	✓	×		
plants	higher dicots		*Plectranthus omissus*	E	E	U	×	×	×	×	✓	×		
plants	higher dicots		*Plectranthus torrenticola*	E	E	U	✓	×	×	×	✓	×		
plants	higher dicots	hairy ricinocarpus	*Ricinocarpos speciosus*	V		U	✓	✓	×	×	✓	×		
plants	higher dicots	hairy hazelwood	*Symplocos harroldii*	NT		C	✓	✓	×	×	✓	×		
plants	higher dicots	red lilly pilly	*Syzygium hodgkinsoniae*	V	V	C	✓	✓	×	✓	✓	✓		
plants	higher dicots	Fraser Island creeper	*Tecomanthe hillii*	NT		U	✓	×	×	×	×	×		
plants	higher dicots	glossy spice bush	*Triunia robusta*	E	E	C	✓	×	×	×	✓	×		
plants	higher dicots		*Westringia blakeana*	NT		C	×	×	×	×	✓	×		
plants	higher dicots		*Westringia grandifolia*	E		C	×	×	×	✓	×	✓		
plants	higher dicots	Nambour zieria	*Zieria bifida*	E	E	C	✓	×	×	×	×	×		
plants	higher dicots		*Zieria exsul*	E		U	×	✓	×	×	×	×		
plants	higher dicots		*Zieria furfuracea subsp. gymnocarpa*	E		O	×	×	×	×	✓	×		
plants	lower dicots	stinking cryptocarya	*Cryptocarya foetida*	V	V	C	✓	✓	×	×	×	×		
plants	lower dicots	birdwing butterfly vine	*Pararistolochia praevenosa*	NT		C	✓	✓	×	✓	✓	✓		
plants	monocots	Queensland lace	*Aponogeton elongatus subsp. elongatus*	NT		U	✓	×	×	×	×	×		
plants	monocots		*Aponogeton elongatus subsp. fluitans*	V		U	✓	×	×	×	×	×		
plants	monocots		*Arthraxon hispidus*	V	V	C	✓	✓	×	×	✓	×		
plants	monocots	Christmas bells	*Blandfordia grandiflora*	E		C	✓	✓	×	✓	×	×		
plants	monocots	miniature moss-orchid	*Bulbophyllum globuliforme*	NT	V	U	undisclosed location							
plants	monocots		*Eulophia bicallosa*	NT		U	×	×	×	×	✓	×		
plants	monocots		*Genoplesium cranei*	V		U	undisclosed location							
plants	monocots		*Genoplesium sigmoideum*	NT		U	undisclosed location							
plants	monocots		*Liparis simmondsii*	NT		U	×	✓	×	×	✓	×		
plants	monocots	Beckler's Papillilabium	*Papillilabium beckleri*	NT		U	×	×	×	×	✓	×		
plants	monocots	yellow swamp orchid/ Greater Swamp orchid	*Phaius australis*	E	E	U	✓	✓	×	✓	✓	✓		*Phaius tancarvilleae* (sp.on 2011 list) has been superseded
plants	monocots		*Prasophyllum exilis*	NT		U	✓	✓	×	✓	×	×		
plants	monocots	Wallum leek orchid	*Prasophyllum wallum*	V	V		undisclosed location							Addition to list since previous list

							Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**NCA status**	**EPBC status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Occurrence**	**Comments**
plants	monocots	dark greenhood	*Pterostylis nigricans*	NT		U	✓	×	×	×	×	×		
plants	monocots		*Romnalda strobilacea*	V	V	U	✓	✓	×	×	✓	✓		
plants	monocots	ravine orchid	*Sarcochilus fitzgeraldii*	E	V	U	✓	×	×	×	×	✓		
plants	monocots		*Thismia rodwayi*	NT		U	×	×	×	×	✓	×		

Table 2: Flora and fauna species no longer listed as a NCA EVNT

						Sightings in major catchments							
Kingdom	**Class**	**Common Name**	**Scientific Name**	**2016 NCA status**	**Shire sighting status**	**Maroochy River**	**Mooloolah River**	**Noosa River**	**Pumicestone Passage**	**Mary River**	**Upper Stanley River**	**Comments**	**2012 NCA status**
animals	amphibians	pouched frog	*Assa darlingtoni*	LC	C	×	×	×	×	✓	✓	status change	NT
animals	amphibians	green thighed frog	*Litoria brevipalmata*	LC	C	✓	✓	×	✓	✓	✓	status change	NT
animals	amphibians	whirring treefrog	*Litoria revelata*	LC	U	undisclosed location						status change	NT
animals	birds	grey goshawk	*Accipiter novaehollandiae*	LC	C	✓	✓	×	✓	✓	✓	status change	NT
animals	birds	Australian swiftlet	*Aerodramus terraereginae*	LC	U	undisclosed location						status change	NT
animals	birds	red-browed treecreeper	*Climacteris erythrops*	LC	C	✓	×	×	✓	✓	×	status change	NT
animals	birds	black-necked stork	*Ephippiorhynchus asiaticus*	LC	C	✓	✓	✓	✓	✓	×	status change	NT
animals	birds	sooty oystercatcher	*Haematopus fuliginosus*	LC	C	✓	✓	×	✓	×	×	status change	NT
animals	birds	Lewin's rail	*Lewinia pectoralis*	LC	C	✓	✓	×	✓	✓	✓	status change	NT
animals	birds	square-tailed kite	*Lophoictinia isura*	LC	C	✓	✓	×	✓	✓	×	status change	NT
animals	birds	black-chinned honeyeater	*Melithreptus gularis*	LC	C	×	✓	×	×	✓	×	status change	NT
animals	birds	turquoise parrot	*Neophema pulchella*	LC	C	✓	×	✓	×	✓	×	status change	NT
animals	birds	cotton pygmy-goose	*Nettapus coromandelianus*	LC	C	✓	✓	×	×	✓	×	status change	NT
animals	birds	freckled duck	*Stictonetta naevosa*	LC	C	✓	✓	×	×	✓	×	status change	NT
animals	birds	sooty owl	*Tyto tenebricosa tenebricosa*	LC	C	✓	✓	×	✓	✓	✓	status change	NT
animals	mammals	golden-tipped bat	*Kerivoula papuensis*	LC	C	×	×	×	×	✓	×	status change	NT
animals	reptiles	elf skink	*Eroticoscincus graciloides*	LC	C	✓	✓	×	✓	✓	✓	status change	NT
animals	reptiles	Rose's shadeskink	*Saproscincus rosei*	LC	C	✓	×	×	×	✓	✓	status change	NT
plants	ferns	coarse tassel fern	*Phlegmariurus phlegmaria*	LC	O	×	✓	×	✓	×	×	name change from *Huperzia phlegmaria*	NT
plants	higher dicots		*Acomis acoma*	LC	C	×	×	×	×	✓	×	status change	NT
plants	higher dicots	doughwood	*Acronychia octandra*	LC	O	×	×	×	×	✓	×	status change	
plants	higher dicots	giant ironwood	*Backhousia subargentea*	LC	O	✓	×	×	×	✓	×	name change from *Choricarpia subargentea*	NT
plants	higher dicots		*Commersonia salviifolia*	LC	U	undisclosed location						status change	NT
plants	higher dicots	rusty vine	*Marsdenia hemiptera*	LC	C	✓	✓	×	×	✓	✓	status change	NT
plants	higher dicots		*Senna acclinis*	LC	U	✓	×	×	×	✓	✓	status change	NT
plants	monocots	mountain reed grass	*Arundinella montana*	LC	C	×	×	×	✓	×	✓	status change	NT
plants	monocots	stream lily	*Helmholtzia glaberrima*	LC	U	×	✓	×	×	×	×	status change	NT
plants	monocots		*Paspalidium scabrifolium*	LC	C	×	×	×	✓	×	×	status change	NT
plants	monocots		*Schoenus scabripes*	LC	C	✓	✓	×	×	×	×	status change	NT

Table 3: EVNT species not considered to occur but may occur seasonally in the SCLGA

Kingdom	Class	Common Name	Scientific Name	2016 NCA status	2016 EPBC status	Comments
animals	birds	Major Mitchell's cockatoo	*Lophochroa leadbeateri*	V		Records within SCC LGA are likely to be aviary escapees
animals	birds	Albert's lyrebird	*Menura alberti*	NT		Previous records in SCC LGA are now erroneous
animals	reptiles	collared delma	*Delma torquata*	V	V	
plants	ferns		*Cyathea exilis*	E	E	Distribution is considered to be restricted to Cape York
plants	higher dicots		*Allocasuarina rigida subsp. exsul*	V		
plants	higher dicots	jointed baloghia	*Baloghia marmorata*	V	V	
plants	higher dicots	Dunn's white gum	*Eucalyptus dunnii*	V		
plants	higher dicots	holly-leaved graptophyllum	*Graptophyllum ilicifolium*	V	V	
plants	higher dicots	bulberin nut	*Macadamia jansenii*	E	E	
plants	higher dicots		*Prostanthera sp. (Mt Tinbeerwah P.R.Sharpe 4781)*	V		
plants	higher dicots		*Samadera bidwillii*	V	V	
plants	higher dicots		*Senegalia pennata*	NT		
plants	higher dicots	brush sophora	*Sophora fraseri*	V	V	
plants	higher dicots	southern penda	*Xanthostemon oppositifolius*	V	V	
plants	lower dicots	cudgerie	*Hernandia bivalis*	NT		

Table acronyms

SCLGA	Sunshine Coast Local Government Area
EVNT	Endangered, vulnerable and near threatened
EPBC	Commonwealth Government's *Environmental Protection and Biodiversity Conservation Act 1999*
NCA	Queensland State Government's *Nature Conservation Act 1992*
EX	Extinct
PE	Presumed Extinct
CE	Critically Endangered
E	Endangered
V	Vulnerable),
NT	Near Threatened
LC	Least concern
C	Confirmed - officially vetted sighting by the Queensland Herbarium or Queensland Museum
U	Unconfirmed – records not yet validated in the Wildnet database
O	Other - record validated by local experts but not officially validated
RSC	Resident of the Sunshine Coast
RM	Regular migrant - Sunshine Coast Council area provides necessary seasonal habitat for these species life cycle requirements
OM	Occasional migrant - these species occasionally utilise habitat areas in the sunshine coast council area
RV	Rare vagrant - Sunshine Coast Council area provides no real known habitat attributes for these species and it is considered unlikely that any conservation actions will directly benefit the conservation or recovery of the species.

ANNEX IV List of main bibliographic references

AEC Group, 2019. AEC, https://www.aecgroupltd.com/ (Accessed 21 August 2019)

Australian Bureau of Statistics, 2019. *2016 Census QuickStats Sunshine Coast* https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA36720 (Accessed 21 August 2019)

Australian Government Department of Environment and Energy, 2019. *Australia's bioregions: Interim Biogeographic Regionalisation for Australia (IBRA)* https://environment.gov.au/land/nrs/science/ibra (Accessed 21 August 2019)

Australian Government Department of Environment and Energy, 2019. *Biodiversity Hotspots*. http://environment.gov.au/biodiversity/conservation/hotspots (Accessed 10 October 2019)

Boardroom Business, 2019. *Sunshine Coast Business Confidence Survey 2018*, http://www.boardroombusiness.com.au/business-confidence-survey/sunshine-coast/ (Accessed 21 August 2019)

Birch-Chapman, S. Hastings, K. and Lawley, M., 2018. *Profile of Sunshine Coast Food and Agribusiness 2018 Update,* University of the Sunshine Coast. Queensland.

Burbidge, N.T., 1960. *The phytogeography of the Australian region in Australian Journal of Botany (8)2* CSIRO https://www.publish.csiro.au/bt/BT9600075 (Accessed 21 August 2019)

Clarke, J., Wilson, L. and Heady, C., 2016. *Future Climate of the Sunshine Coast, Queensland: Projections of temperature, rainfall, extremes and drought* CSIRO, Melbourne https://publications.csiro.au/rpr/download?pid=csiro:EP162378&dsid=DS5 (Accessed 21 August 2019)

Commonwealth of Australia, 2008. *Provincial bioregions of the East Marine Region* (IMCRA v.4.0) https://www.researchgate.net/profile/Lyndon_Devantier/publication/278038720/figure/fig1/AS:294371460173842@1447195033811/Marine-bioregions-of-eastern-Australia-The-Sunshine-Coast-forms-part-of-the-Central.png (Accessed 21 August 2019)

Currimundi Catchment Care Group Inc., 2019. http://www.currimundicatchment.org.au/cccg/ (Accessed 26 September 2019)

DeVantier, L., 2010. *Reef-building Corals of Hervey Bay, South-east Queensland Technical Report* Researchgate

https://www.researchgate.net/publication/285100297_DeVantier_2010_Reef-building_Corals_of_Hervey_Bay_South-east_Queensland (Accessed 21 August 2019)

IPCC., 2019. *AR5 Synthesis Report: Climate Change 2014*. https://www.ipcc.ch/report/ar5/syr/ (Accessed 21 August 2019)

Kottek, M., J. Grieser, C. Beck, Rudolf, B., and Rubel, F., 2006. *World Map of the Köppen-Geiger climate classification* updated in *Meteorologische Zeitschrift, 15, 259-263* https://www.schweizerbart.de/papers/metz/detail/15/55034/World_Map_of_the_Koppen_Geiger_climate_classificat?af=crossref (Accessed 21 August 2019)

Native Title Tribunal, 2019. *About Native Title Applications*. http://www.nntt.gov.au/nativetitleclaims/Pages/default.aspx (Accessed 12 October 2019)

Olsen *et.al*., 2001.*Terrestrial ecoregions of the world: a new map of life on earth* in: *Bioscience: November 2001 / Vol.51 No. 11* https://academic.oup.com/bioscience/article/51/11/933/227116 (Accessed 21 August 2019)

Profile ID, 2019. *Sunshine Coast Council - Community Profile* https://profile.id.com.au/sunshine-coast/about (Accessed 21 August 2019)

Profile ID, 2019. *Sunshine Coast Council - Economic profile* https://economy.id.com.au/sunshine-coast (Accessed 21 August 2019)

Queensland Government, 2019. *Queensland's Planning System* https://planning.dsdmip.qld.gov.au/planning/our-planning-system/the-legislation (Accessed 21 August 2019)

Queensland Government, 2019. *Planning Act 2016* https://www.legislation.qld.gov.au/view/html/inforce/current/act-2016-025 (Accessed 21 August 2019)

Queensland Government Department of Infrastructure, Local Government and Planning, 2019. *ShapingSEQ: South East Queensland Regional Plan 2017* https://dilgpprd.blob.core.windows.net/general/shapingseq.pdf (Accessed 21 August 2019)

Queensland Government Department of Agriculture and Fisheries, 2019. *Sustainable Fisheries Strategy* https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy (Accessed 21 August 2019)

Queensland Government, 2019. *Soils data* https://www.qld.gov.au/environment/land/management/soil/soil-data (Accessed 21 August 2019)

Sattler, P.S. and Williams, R.D. (eds), 1999. *The conservation status of Queensland's bioregional ecosystems,* Environmental Protection Agency, Brisbane, Australia.

State Library of Queensland, 2019. *Indigenous Languages Map of Queensland* https://www.slq.qld.gov.au/discover/aboriginal-and-torres-strait-islander-cultures-and-stories/languages/queensland/indigenous-languages-map (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Organisational Sustainability Reporting*, https://www.sunshinecoast.qld.gov.au/Council/Budget-Financial-and-Annual-Reports/Organisational-Environmental-Sustainability-Reporting (Accessed 29 September 2019)

Sunshine Coast Council, 2019. *Biodiversity Report 2016 for the Sunshine Coast Local Government Area* https://www.sunshinecoast.qld.gov.au/Environment/Bushland-Protection/Biodiversity-Report (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Draft Sunshine Coast Community Strategy 2019-2041* https://haveyoursay.sunshinecoast.qld.gov.au/draft-community-strategy (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Environment and Liveability Strategy 2017* https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Regional-Strategies/Environment-and-Liveability-Strategy-2017 (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Sunshine Coast Heritage Plan 2015-2020* https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Council-Plans/Sunshine-Coast-Heritage-Plan (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Sunshine Coast Planning Scheme 2014* https://www.sunshinecoast.qld.gov.au/Development/Planning-Documents/Sunshine-Coast-Planning-Scheme-2014 (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Sunshine Coast Social Strategy 2015* https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Regional-Strategies/Sunshine-Coast-Social-Strategy-2015 (Accessed 21 August 2019)

Sunshine Coast Council, 2019. *Sunshine Coast - The Natural Advantage: Regional Economic Development Strategy 2013-2033* https://invest.sunshinecoast.qld.gov.au/Economic-Strategy/Regional-Economic-Development-Strategy (Accessed 21 August 2019)

Sunshine Coast Council Heritage, 2019, *Heritage Levy* https://wcms.sunshinecoast.qld.gov.au/sitecore/content/SCC-Heritage/Home/About/Heritage-Levy/Hertiage-Planning (Accessed 21 August 2019)

Sunshine Coast Council, 2019, *Mary Cairncross Scenic Reserve* https://www.sunshinecoast.qld.gov.au/Environment/Get-Involved-in-Conservation/Environmental-Education-Centres/Mary-Cairncross-Scenic-Reserve (Accessed 21 August 2019)

The South East Queensland Ecosystem Services Framework http://www.ecosystemservicesseq.com.au/index.html (Accessed 21 August 2019)

Udvardy, M.D.F., 1975. *A classification of the biogeographical provinces of the world: IUCN Occasional Paper No. 18* International Union for Conservation of Nature and Natural Resources, Switzerland. http://cmsdata.iucn.org/downloads/udvardy.pdf (Accessed 21 August 2019)

Visit Sunshine Coast, 2019. *Strategies and plans* http://www.visitsunshinecoast.com/Corporate/About-us/Strategy-and-plans (Accessed 21 August 2019)

Willmott, W., 2007. *Rocks and landscapes of the Sunshine Coast. Revised edition now including Gympie district* Geological Society of Australia, Queensland Division, Underwood, Queensland.

Wilson, P.R. and Taylor, P.M., 2012. *Land Zones of Queensland* Queensland Herbarium, Queensland Department of Science, Information Technology, Innovation and the Arts, Brisbane. https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/land-zones (Accessed 21 August 2019)

Sunshine Coast ecosystems - spatial extents, descriptions, species, processes and threats

NCA = Nature Conservation Act; SEQ = South East Queensland bioregion; SC = Sunshine Coast; SC extents from unpublished Council analyses; All other information from State Regional Ecosystems Database - https://apps.des.qld.gov.au/regional-ecosystems/

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
Foredunes							
12.2.5	Least concern	Pre-clear 16,000ha; Remnant 11,000ha	Pre-clear 209ha; Remnant 58ha (28%)	Open forest to low closed forest. Species can include Corymbia intermedia, Lophostemon confertus, Banksia integrifolia subsp. integrifolia, B. aemula, Callitris columellaris, Acacia spp., Livistona spp. and Endiandra sieberi. Melaleuca quinquenervia in swales. Understorey generally shrubby and can include vine forest species. Occurs on Quaternary coastal dunes, beach ridges and sandy banks of coastal streams.	Potential habitat for Threatened species: Acacia attenuata, Acacia baueri subsp. baueri, Boronia rivularis, Durringtonia paludosa, Glycine argyrea, Macarthuria complanata, Maundia triglochinoides, Persicaria elatior, Phaius australis	Protection relies on broad-scale management of surrounding country. Triggers unrelated to fire appear to maintain a healthy ecosystem. Issues with lantana and other weeds may result from fire and other disturbance. Contains palustrine wetland (e.g. in swales).	This RE is vulnerable south of Noosa due to weed invasion, recreational use and threat of over-frequent fire. Southern half of bioregion.
12.2.14	Least concern	Pre-clear 22,000ha; Remnant 22,000ha	Pre-clear 406ha; Remnant 276ha (68%)	Strand and fore dune complex comprising Spinifex sericeus grassland Casuarina equisetifolia subsp. incana low woodland/open forest and with Acacia leiocalyx, A. disparrima subsp. disparrima, Banksia integrifolia subsp. integrifolia, Pandanus tectorius, Corymbia tessellaris, Cupaniopsis anacardioides, Acronychia imperforata. Occurs mostly on frontal dunes and beaches but can occur on exposed parts of dunes further inland.		Casuarina equisetifolia is very sensitive to fire and germination after fire is typically very low or negligible. Triggers unrelated to fire appear to maintain a healthy ecosystem. Issues with lantana and other weeds may result from fire and other disturbance.	
Mangrove and saltmarsh							
12.1.2	Least concern	Pre-clear 32,000ha; Remnant 27,000ha	Pre-clear 706ha; Remnant 490ha (69%)	Saltpan vegetation comprising Sporobolus virginicus grassland and samphire herbland. Grasses including Zoysia macrantha subsp. macrantha sometimes present in upper portions of tidal flats. Includes saline or brackish sedgelands. Usually occurs on hypersaline Quaternary estuarine deposits. Marine plains/tidal flats.	Habitat for threatened fauna species including the false water-rat Xeromys myoides in the southern part of the bioregion particularly in areas immediately adjacent to mangroves, 12.1.3.	Estuarine wetlands. Tidally inundated less frequently than mangroves.	This ecosystem is under threat from sea level rise along its seaward margin.
12.1.3	Least concern	Pre-clear 55,000ha; Remnant 52,000ha	Pre-clear 1621ha; Remnant 1616ha (100%)	Mangrove shrubland to low closed forest. Occurs on Quaternary estuarine deposits.	Habitat for threatened fauna species including the false water-rat Xeromys myoides in the southern part of the bioregion particularly in areas immediately adjacent to saltpans, 12.1.2.	Scorching within the supra-littoral margin, particularly when this ecotone merges into flammable vegetation such as woodlands and forests of melaleuca may be a problem. Estuarine wetlands (e.g. mangroves).	
Heath and Wallum							
12.2.9	Least concern	Pre-clear 66,000ha; Remnant 64,000ha	Pre-clear 179ha; Remnant 68ha (38%)	Banksia aemula low open woodland. Mallee eucalypts sometimes present, e.g. Eucalyptus latisinensis. Occurs on Quaternary coastal dunes and sandplains with deeply leached soils.	One of the communities included under the common name 'wallum'. Floristically rich. Habitat for near threatened plant species including Macarthuria complanata.	Often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Too frequent a fire frequency may result in a net loss of nutrients over time from an already nutrient poor system.	Extensively cleared for urban development. Mostly on sand mass islands with a naturally restricted extent on the mainland south of Noosa.
12.2.12	Of concern	Pre-clear 14,000ha; Remnant 10,000ha	Pre-clear 2334ha; Remnant 747ha (32%)	Closed or wet heath +/- stunted emergent shrubs/low trees. Characteristic shrubs include Banksia spp. (especially B. robur) Boronia falcifolia, Epacris spp., Baeckea frutescens, Schoenus brevifolius, Leptospermum spp., Hakea actites, Melaleuca thymifolia, M. nodosa, Xanthorrhoea fulva with Baloskion spp. and Sporadanthus spp. in ground layer. Occurs on poorly drained Quaternary coastal dunes and sandplains. Low part of sand mass coastal landscapes	Habitat for threatened plant species including Blandfordia grandiflora, Acacia baueri and near threatened species including Boronia rivularis, Durringtonia paludosa. Habitat for threatened fauna including the ground parrot Pezoporus wallicus wallicus.	This vegetation often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Palustrine wetland (e.g. vegetated swamp).	Subject to high rate of clearing for urbanisation south of Noosa; the RE is considered to be endangered in this area.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				where water collects from both overland flow and infiltration from adjoining sand dunes.			
12.2.15	Least concern	Pre-clear 18,000ha; Remnant 18,000ha	Pre-clear 209ha; Remnant 160ha (77%)	Closed sedgeland in coastal swamps and associated water bodies. Characteristic species include Gahnia sieberiana, Empodisma minus, Gleichenia spp., Blechnum indicum, Lepironia articulata, Baumea spp., Juncus spp., and Eleocharis spp. Occurs on Quaternary coastal dunes and beaches. Low part of coastal landscape where water collects from both overland flow and infiltration from adjoining sand dunes.	Potential habitat for Threatened species: Durringtonia paludosa, Eleocharis difformis, Maundia triglochinoides, Thelypteris confluens Habitat for ground parrot.	Some elements of this RE will be flammable. Though not usually deliberately burnt, fire should not be avoided. This RE will often burn in association with surrounding ecosystems. Palustrine wetland (e.g. vegetated swamp).	This ecosystem has been subject to disturbance and extensively in filled or modified by urban development in the south of bioregion and the RE is considered to be endangered in this area.
12.2.15a	As per 12.2.15	As per 12.2.15	As per 12.2.15	Vegetation communities in thie regional ecosystems. Permanent and semi-permanent window lakes. Occurs as a window into the water table on Quaternary coastal dunes and beaches. Low part of coastal landscape where water collects from both overland flow and infiltration from adjoining sand dunes. Lacustrine wetland (e.g. lake).	As per 12.2.15	As per 12.2.15	As per 12.2.15
12.3.8	Of concern	Pre-clear 7,000ha; Remnant 4,000ha	Pre-clear 272ha; Remnant 205ha (75%)	Swamps with characteristic species including Cyperus spp., Schoenoplectus spp., Philydrum lanuginosum, Eleocharis spp., Leersia hexandra, Cycnogeton procerus, Nymphaea spp., Nymphoides indica, Persicaria spp., Phragmites australis, Typha spp. and a wide range of sedges grasses or forbs. Emergent Melaleuca spp. may sometimes occur. Occurs in freshwater swamps associated with floodplains.	Important for water birds and freshwater invertebrates and vertebrates such as tortoises.	Some elements of this RE will be flammable. Though not usually deliberately burnt, fire should not be avoided. This RE will often burn in association with surrounding ecosystems. Palustrine wetland (e.g. vegetated swamp).	Many shallower seasonal water bodies in the region have been drained or have become silted. Generally a palustrine wetland although also includes larger areas of lacustrine water bodies, particularly in association with modifications to hydrology associated with construction of bunding and levees.
12.3.13	Least concern	Pre-clear 22,000ha; Remnant 13,000ha	Pre-clear 4175ha; Remnant 1295ha (31%)	Closed or wet heathland. Characteristic species include Melaleuca thymifolia, Banksia robur, Xanthorrhoea fulva, Hakea actites, Leptospermum spp. and Baeckea frutescens. Occurs on seasonally waterlogged Quaternary alluvial plains along coastal lowlands.	Potential habitat for threatened species: Acacia attenuata, Acacia baueri subsp. baueri, Allocasuarina emuina, Blandfordia grandiflora, Boronia keysii, Boronia rivularis, Eucalyptus conglomerata	This vegetation often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Palustrine wetland (e.g. vegetated swamp).	Generally a palustrine wetland although in cane growing areas near Bundaberg some have been converted to lacustrine water bodies associated with the construction of bunding and levees.
12.3.14	Of concern	Pre-clear 13,000ha; Remnant 6,000ha	Pre-clear 487ha; Remnant 124ha (25%)	Banksia aemula low woodland +/- mallee eucalypt low woodland. Associated canopy species include Eucalyptus latisinensis, Corymbia intermedia, E. robusta and Lophostemon confertus. Occurs on Quaternary alluvial plains along coastal lowlands.	Habitat for threatened plant species including Eucalyptus conglomerata.	This vegetation often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed.	
12.5.9	Of concern	Pre-clear 12,000ha; Remnant 7,000ha	Pre-clear 50ha; Remnant 23ha (47%)	Sedgeland to heathland often with emergent Eucalyptus latisinensis. Characteristic shrubs include Leptospermum spp., Leucopogon spp., Ricinocarpos pinifolius, Strangea linearis, Brachyloma daphnoides, Persoonia virgata, Xanthorrhoea spp., Styphelia viridis, Monotoca scoparia, Woollsia pungens and stunted Allocasuarina littoralis. Includes minor seepage areas containing Banksia robur and Xanthorrhoea fulva.	Habitat for near threatened plant species including Melaleuca cheelii.	Often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Too frequent a fire frequency may result in a net loss of nutrients over time from an already nutrient poor system. Contains palustrine wetland (e.g. in swales).	

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks. Lower slopes.			
12.5.10	Least concern	Pre-clear 26,000ha; Remnant 16,000ha	Pre-clear 45ha; Remnant 35ha (77%)	Eucalyptus latisinensis and/or Banksia aemula low open woodland +/- Corymbia trachyphloia subsp. trachyphloia. Diverse understorey of heath species. Occurs on complex of remnant Tertiary surfaces and Tertiary sedimentary rocks.	Potential habitat for Threatened species: Acacia baueri subsp. baueri, Macrozamia pauli-guilielmi, Melaleuca cheelii	Often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Too frequent a fire frequency may result in a net loss of nutrients over time from an already nutrient poor system.	
12.8.19	Of concern	Pre-clear 4,000ha; Remnant 4,000ha	Pre-clear 207ha; Remnant 207ha (100%)	Heath and rock pavement with scattered shrubs or open woodland. Occurs on Cainozoic igneous rocks especially rhyolite and trachyte. Higher altitude heaths exhibit a high level of species endemism.	Habitat for threatened plant species including Arundinella grevillensis, Gonocarpus effusus, Pomaderris notata, Acacia saxicola, Allocasuarina emuina, A. thalassoscopica, Grevillea linsmithii, Westringia grandifolia, Leionema elatius subsp. beckleri, Coopernookia scabridiuscula, Dodonaea rupicola, Eucalyptus kabiana, Banksia conferta, Leptospermum luehmannii, L. oreophilum, Pultenaea whiteana, Westringia rupicola, Westringia sericea. Habitat for many other species with restricted or disjunct distributions.	Some rare and threatened plants (e.g., Kunzea flavescens) require long intervals between fires. There will be a number of obligate seeding species in this community so variability in regime is required. Any planned burning should be conducted in association with plans for surrounding vegetation.	Frequent fire favours fire-tolerant species at the expense of fire-sensitive species.
12.9-10.22	Of concern	Pre-clear 2,000ha; Remnant 1,000ha	Pre-clear 265ha; Remnant 15ha (6%)	Closed sedgeland to heathland with emergent trees. Characteristic species include Schoenus brevifolius and/or Baumea juncea and/or Banksia robur and/or Melaleuca nodosa. Sometimes grading into Banksia aemula woodland on rises. Usually occurs on lower slopes subject to periodic water logging on Cainozoic and Mesozoic sediments.	Habitat for near threatened species Melaleuca cheelii.	This vegetation often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed. Palustrine wetland (e.g. vegetated swamp).	Under threat of becoming rare locally in some parts of the bioregion.
12.12.10	Of concern	Pre-clear 2,000ha; Remnant 2,000ha	Pre-clear 7ha; Remnant 7ha (94%)	Shrubland or heath sometimes with emergent Eucalyptus acmenoides. Associated with rocky soils derived from Mesozoic to Proterozoic igneous rocks.	Habitat for threatened flora species including Daviesia discolor, Cassinia collina, Coopernookia scabridiuscula and near threatened species including Melaleuca formosa, Acacia pubicosta. Habitat for other species with restricted or disjunct distributions. Higher altitude heaths exhibit a high level of species endemism.	Some rare and threatened plants (e.g., Kunzea flavescens) require long intervals between fires. There will be a number of obligate seeding species in this community so variability in regime is required. Any planned burning should be conducted in association with plans for surrounding vegetation.	Subject to over burning (frequent fire favours fire-tolerant species at the expense of fire-sensitive species) and habitat sometimes favoured for telecommunication towers and other mountain top infrastructure.
12.12.19	Of concern	Pre-clear 1,000ha; Remnant 1,000ha	Pre-clear 9ha; Remnant 4ha (39%)	Vegetation complex of exposed rocky headlands. Vegetation types include Themeda triandra grassland and wind-sheared shrubland and woodland. Occurs on Mesozoic to Proterozoic igneous headlands.		Fire exclusion and buffering from fire is not necessary.	Under pressure for tourist development due to prime location and scenic value.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.12.19x2	As per 12.12.19	As per 12.12.19	As per 12.12.19	As per 12.12.19 Occurs on headlands of Cainozoic and Mesozoic sediments.	As per 12.12.19	As per 12.12.19	As per 12.12.19
12.12.19x3	As per 12.12.19	As per 12.12.19	As per 12.12.19	As per 12.12.19 Occurs on headlands of remnant Tertiary surfaces.	As per 12.12.19	As per 12.12.19	As per 12.12.19
Melaleuca and Casuarina							
12.1.1	Of concern	Pre-clear 6,000ha; Remnant 4,000ha	Pre-clear 684ha; Remnant 425ha (62%)	Casuarina glauca open forest to low open woodland. Occurs on margins of Quaternary estuarine deposits	Provides estuarine wetland habitat	A long fire interval could increase fire intensity when fire occurs, thus detrimentally affecting the tree layer. Recovery should be relatively quick (approximately 10 years to a woodland/open forest community). A 'grassy' ecosystem might be lost if fire is excluded or too frequent (<2 years). Fire exclusion and buffering from fire is not necessary. Estuarine wetlands. Infrequently tidally inundated. This RE occupies a very small niche at upper end of tidal zone.	
12.2.7	Least concern	Pre-clear 31,000ha; Remnant 19,000ha	Pre-clear 7256ha; Remnant 2240ha (31%)	Melaleuca quinquenervia or rarely M. dealbata open forest. Other species include Eucalyptus tereticornis, Corymbia intermedia, E. bancroftii, E. latisinensis, E. robusta, Lophostemon suaveolens and Livistona decora. A shrub layer may occur with frequent species including Melastoma malabathricum subsp. malabathricum or Banksia robur. The ground layer is sparse to dense and comprised of species including the ferns Pteridium esculentum and Blechnum indicum the sedges Schoenus brevifolius, Baloskion tetraphyllum subsp. meiostachyum, Baumea rubiginosa and Gahnia sieberiana and the grass Imperata cylindrica.	Habitat for threatened plant species including Phaius australis, P. bernaysii and near threatened species including Durringtonia paludosa.	Melaleuca forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness. High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. Palustrine wetland (e.g. vegetated swamp). Occurs on Quaternary coastal dunes and seasonally waterlogged sandplains usually fringing drainage system behind beach ridge plains or on old dunes, swales and sandy coastal creek levees.	
12.2.7a	As per 12.2.7.	As per 12.2.7	As per 12.2.7	Vegetation comprises melaleuca quinquenervia low woodland with Gahnia sieberiana ground layer. Occurs on Quaternary coastal sand dunes fringing swamps. Palustrine wetland (e.g. vegetated swamp).	As per 12.2.7.	As per 12.2.7	Largely restricted to southern sand mass islands.
12.2.7c	As per 12.2.7.	As per 12.2.7	As per 12.2.7	Melaleuca quinquenervia, Eucalyptus robusta, Melicope elleryana open forest with understorey of Todea barbara. Occurs along watercourses on Quaternary coastal dunes and beaches and seasonally waterlogged sandplains. Palustrine wetland (e.g. vegetated swamp).	As per 12.2.7	As per 12.2.7	Largely restricted to southern sand mass islands.
12.3.4	Of concern	Pre-clear 17,000ha; Remnant 8,000ha	Pre-clear 5728ha; Remnant 1327ha (23%)	Open forest to woodland of Melaleuca quinquenervia and Eucalyptus robusta. Occurs fringing drainage lines and on floodplains in coastal areas.	Habitat for threatened fauna species including the wallum froglet Crinia tinnula.	Melaleuca forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness (since these communities contain numerous obligate seed regenerating species that require sufficient fire intervals to produce seed). High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. Palustrine wetland (e.g. vegetated swamp).	

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.3.5	Least concern	Pre-clear 45,000ha; Remnant 20,000ha	Pre-clear 9796ha; Remnant 2921ha (30%)	Melaleuca quinquenervia open forest to woodland. Understorey depends upon duration of water logging; sedges and ferns, especially Blechnum indicum, in wetter microhabitats and grasses and shrubs in drier microhabitats. Ground layer species include the grasses Leersia hexandra and Imperata cylindrica, the sedges/rushes, Baumea rubiginosa, Gahnia sieberiana, Lepironia articulata, Schoenus brevifolius and Schoenus scabripes and the fern Lygodium microphyllum. Other tree species that may be present as scattered individuals or clumps include Lophostemon suaveolens, Eucalyptus robusta, E. tereticornis, E. bancroftii, E. latisinensis, Corymbia intermedia, Melaleuca salicina, Livistona australis, Casuarina glauca, Endiandra sieberi. Melastoma malabathricum subsp. malabathricum, Glochidion sumatranum and Melicope elleryana are often in understorey. Occurs on Quaternary alluvium in coastal areas.	Habitat for threatened flora species including Phaius australis and P. bernaysii. Habitat for threatened fauna including the wallum froglet Crinia tinnula.	Melaleuca forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness (since these communities contain numerous obligate seed regenerating species that require sufficient fire intervals to produce seed). High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. Palustrine wetland (e.g. vegetated swamp).	Extensively cleared for sugar cane and urban development in south of bioregion. Subject to weed invasion, especially groundsel Baccharis halimifolia. Data on clearing rate between 1995 and 1997 indicate that the RE continues to experience an annual loss in excess of 1% of current extent per year. Generally a palustrine wetland although also some areas have been converted to lacustrine water bodies associated with the construction of bunding and levees.
12.3.6	Least concern	Pre-clear 32,000ha; Remnant 13,000ha	Pre-clear 2827ha; Remnant 811ha (29%)	Melaleuca quinquenervia +/- Eucalyptus tereticornis, Lophostemon suaveolens, Corymbia intermedia open forest to woodland with a grassy ground layer dominated by species such as Imperata cylindrica. Eucalyptus tereticornis may be present as an emergent layer. Eucalyptus seeana may also occur in this ecosystem to the south and east of Brisbane. Occurs on Quaternary floodplains and fringing drainage lines in coastal areas.	Habitat for threatened fauna species including the wallum froglet Crinia tinnula.	Melaleuca forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness (since these communities contain numerous obligate seed regenerating species that require sufficient fire intervals to produce seed). High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. Palustrine wetland (e.g. vegetated swamp).	Generally a palustrine wetland although also some areas have been converted to lacustrine water bodies associated with the construction of bunding and levees.
12.3.7	Least concern	Pre-clear 118,000ha; Remnant 60,000ha	Pre-clear 1025ha; Remnant 462ha (45%)	Narrow fringing woodland of Eucalyptus tereticornis, Casuarina cunninghamiana subsp. cunninghamiana +/- Melaleuca viminalis. Other species associated with this RE include Melaleuca bracteata, M. trichostachya, M. linariifolia. North of Brisbane Waterhousea floribunda commonly occurs and may at times dominate this RE. Melaleuca fluviatilis occurs in this RE in the north of the bioregion. Lomandra hystrix often present in stream beds. Occurs on fringing levees and banks of rivers and drainage lines of alluvial plains throughout the region.	Habitat for an extensive range of aquatic flora and fauna.	Protection relies on broad-scale management of surrounding country. However, fire exclusion is not necessary. Casuarina cunninghamiana is sensitive to fire and germination after fire is typically low. Triggers unrelated to fire appear to maintain a healthy ecosystem. Issues with lantana and other weeds may result from fire and other disturbance. Riverine wetland or fringing riverine wetland.	Prone to invasions by weeds such as (Chinese elm) Celtis sinensis, (broad leaved pepper tree) Schinus terebinthifolius and (cat's claw creeper) Macfadyena unguis-cati. Canopy height and cover is highly variable due to flood damage.
12.3.7b	As per 12.3.7	As per 12.3.7	As per 12.3.7	Naturally occurring instream waterholes and lagoons, both permanent and intermittent. Includes exposed stream bed and bars. Occurs in the bed of active (may be intermittent) river channels. Riverine wetland or fringing riverine wetland.	As per 12.3.7	As per 12.3.7	Vegetation may occur on infrequently inundated areas.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.3.20	Endangered	Pre-clear 15,000ha; Remnant 3,000ha	Pre-clear 1351ha; Remnant 504.6ha (37%)	Melaleuca quinquenervia, Casuarina glauca +/- Eucalyptus tereticornis, E. siderophloia open forest. Occurs on lowest terraces of Quaternary alluvial plains in coastal areas.	Potential habitat for Threatened species: Acacia attenuata, Allocasuarina emuina, Lenwebbia sp. (Blackall Range P.R.Sharpe 5387), Maundia triglochinoides, Persicaria elatior, Phaius australis, Phaius bernaysii, Symplocos harroldii, Tecomanthe hillii	Melaleuca forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness (since these communities contain numerous obligate seed regenerating species that require sufficient fire intervals to produce seed). High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. Palustrine wetland (e.g. vegetated swamp). May be subject to storm surge inundation.	Extensively cleared for sugar cane and urban development in south of bioregion. Subject to weed invasion, especially groundsel Baccharis halimifolia.
Eucalypt							
12.2.6	Least concern	Pre-clear 73,000ha; Remnant 69,000ha	Pre-clear 41ha; Remnant 6ha (15%)	Eucalyptus racemosa subsp. racemosa, Corymbia intermedia, C. gummifera, Angophora leiocarpa and E. pilularis shrubby or grassy woodland to open forest. Occurs on Quaternary coastal dunes and beaches. Dunes with deeply leached soils.	Potential habitat for Threatened species: Boronia rivularis, Glycine argyrea, Macrozamia pauli-guilielmi	Fires that are too frequent will eliminate obligate seeding species. Fire frequency should be such as to allow trees to reach maturity and produce viable seed.	
12.2.8	Least concern	Pre-clear 22,000ha; Remnant 22,000ha	Pre-clear 60ha; Remnant 8ha (14%)	Eucalyptus pilularis, E. microcorys, E. resinifera and Syncarpia hillii open forest. Occurs on parabolic high dunes.	Potential habitat for Threatened species: Boronia rivularis, Glycine argyrea, Macrozamia pauli-guilielmi	High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create disturbance that will keep the understorey diverse.	
12.3.2	Of concern	Pre-clear 22,000ha; Remnant 7,000ha	Pre-clear 9301ha; Remnant 3026ha (33%)	Eucalyptus grandis +/- E. microcorys, Lophostemon confertus tall open forest with vine forest understorey ('wet sclerophyll'). Patches of Eucalyptus pilularis sometimes present especially in vicinity of sedimentary rocks (e.g. around Palmwoods). Fringing streams and in narrow gullies in high rainfall areas.	Habitat for threatened plant species including Marsdenia longiloba and near threatened species including Diteilis simmondsii.	Requires fire for regeneration. There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll. Riverine wetland or fringing riverine wetland.	Habitat fragmented by land uses such as horticulture and rural residential. Much of this RE is prone to infestation by weeds, especially Lantana camara. Highest-rainfall parts of the bioregion.
12.3.11	Of concern	Pre-clear 173,000ha; Remnant 42,000ha	Pre-clear 11273ha; Remnant 578ha (5%)	Eucalyptus tereticornis +/- E. siderophloia and Corymbia intermedia open forest to woodland. Corymbia tessellaris, Lophostemon suaveolens and Melaleuca quinquenervia frequently occur and often form a low tree layer. Other species present in scattered patches or low densities include Angophora leiocarpa, E. exserta, E. grandis, C. trachyphloia, C. citriodora subsp. variegata, E. latisinensis, E. tindaliae, E. racemosa and Melaleuca sieberi. E. seeana may be present south of Landsborough and Livistona decora may occur in scattered patches or low densities in the Glenbar SF and Wongi SF areas. Occurs on Quaternary alluvial plains and drainage lines along coastal lowlands. Rainfall usually exceeds 1000mm/y.	Potential habitat for Threatened species: Acronychia littoralis, Alectryon ramiflorus, Arthraxon hispidus, Cupaniopsis shirleyana, Eulophia bicallosa, Gossia gonoclada, Macrozamia lomandroides, Macrozamia pauli-guilielmi, Marsdenia coronata, Maundia trigl	Control of weeds is a major focus of planned burning in most areas. Contains palustrine wetland (e.g. in swales).	Extensively cleared and modified in populous southern parts of the bioregion.
12.3.11a	As per 12.3.11	As per 12.3.11	Pre-clear 9ha; Remnant 4ha (42%)	Vegetation comprises open forest of Eucalyptus tereticornis and/or E. siderophloia, Lophostemon confertus with vine forest understorey. Other canopy species include Corymbia intermedia, Araucaria cunninghamii and Agathis robusta. Frequently occurring understorey species include Flindersia spp., Lophostemon suaveolens, L. confertus, Cupaniopsis	Habitat for threatened fauna species including the Black-breasted Button-quail Turnix melanogaster. (Aridis, Melzer and Hamley, 1998)	As per 12.3.11	Understorey is a likely product of long term fire exclusion.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				parvifolia, Acronychia spp., Alphitonia excelsa and Acacia disparrima subsp. disparrima. Occurs on sub-coastal Quaternary alluvial plains. Rainfall usually exceeds 1000mm/y. Floodplain (other than floodplain wetlands).			
12.3.14a	Of concern	12.3.14: Pre-clear 13,000ha; Remnant 6,000ha	Pre-clear 876ha; Remnant 194ha (22%)	Eucalyptus racemosa subsp. racemosa woodland to open forest. Other canopy species may include Corymbia intermedia, C. gummifera, Eucalyptus latisinensis, E. tindaliae and Melaleuca quinquenervia. Occurs on Quaternary alluvial plains in near coastal areas.	Habitat for threatened plant species including Eucalyptus conglomerata.	This vegetation often contains obligate seed regenerating species and as such, the application of frequent fire may reduce species richness if the intervals between fire are not sufficient for plants to produce seed.	Often found on stranded river terraces and higher level Pleistocene alluvium above the floodplain.
12.5.2a	Endangered	12.5.2: Pre-clear 37,000ha; Remnant 5,000ha	Pre-clear 471ha; Remnant 18ha (4%)	Corymbia intermedia, Eucalyptus tereticornis woodland. Other species can include Lophostemon suaveolens, Angophora leiocarpa, Eucalyptus acmenoides or E. portuensis, E. siderophloia or E. crebra, Corymbia tessellaris and Melaleuca quinquenervia (lower slopes). Eucalyptus exserta is usually present in northern parts of bioregion. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments usually in coastal areas with deep red soils.	Potential habitat for threatened species: Samadera bidwillii	Control of weeds is a major focus of planned burning in most areas. Located in coastal areas.	Has been extensively cleared for horticulture, sugar cane and urban development.
12.5.3	Endangered	Pre-clear 57,000ha; Remnant 6,000ha	Pre-clear 12126ha; Remnant 1390ha (11%)	Eucalyptus racemosa subsp. racemosa woodland with Corymbia intermedia, E. siderophloia +/- E. tindaliae, E. resinifera, E. pilularis, E. microcorys, Angophora leiocarpa. Melaleuca quinquenervia is often a prominent feature of lower slopes. Minor patches (<1ha) dominated by Corymbia citriodora subsp. variegata sometimes occur. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments.	Potential habitat for Threatened species: Allocasuarina emuina, Eucalyptus curtisii, Leptospermum oreophilum	A diversity of season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics. Fires that are too frequent will eliminate obligate seeding species.	Extensively cleared for exotic pine plantation, horticulture and urban development. Occurs from Noosa southward.
12.5.4	Least concern	Pre-clear 207,000ha; Remnant 100,000ha	Pre-clear 40ha; Remnant 27ha (68%)	Eucalyptus latisinensis +/- Corymbia intermedia, C. trachyphloia subsp. trachyphloia, Angophora leiocarpa, Eucalyptus exserta woodland. Other characteristic species include Eucalyptus siderophloia, Lophostemon suaveolens, Melaleuca viridiflora var. viridiflora, M. quinquenervia, M. cheelii and Grevillea banksii. Patches of Allocasuarina luehmannii or Banksia oblongifolia present locally and Xanthorrhoea johnsonii common in ground layer. Occurs on complex of remnant Tertiary surfaces and Cainozoic and Mesozoic sediments.	Habitat for threatened plant species including Macrozamia lomandroides and near threatened species including Melaleuca cheelii.	Control of weeds is a major focus of planned burning in most areas. Variability in season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics. Contains palustrine wetland (e.g. in swales).	Has been extensively cleared and fragmented for exotic pine plantation, sugar cane and rural residential development.
12.5.6c	Endangered	12.5.6: Pre-clear 36,000ha; Remnant 8,000ha	Pre-clear 620ha; Remnant 289ha (47%)	Eucalyptus pilularis open forest +/- E. siderophloia, E. propinqua, Corymbia intermedia, E. microcorys, E. acmenoides, E. tereticornis, E. biturbinata, Lophostemon confertus with E. saligna, E. montivaga at higher altitudes. Occurs on remnant Tertiary surfaces. Usually deep red soils.	Potential habitat for Threatened species: Caustis blakei subsp. macrantha, Paspalidium grandispiculatum	Fires that are too frequent will eliminate obligate seeding species. There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll.	

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.8.8	Of concern	Pre-clear 14,000ha; Remnant 6,000ha	Pre-clear 3457ha; Remnant 578ha (17%)	Eucalyptus saligna subsp. saligna or E. grandis tall open forest often with vine forest understorey ('wet sclerophyll'). Other species include Eucalyptus microcorys, E. acmenoides, Lophostemon confertus and Syncarpia glomulifera subsp. glomulifera. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks.	Potential habitat for threatened species: Arthraxon hispidus, Cupaniopsis newmanii, Eucalyptus dunnii, Lepiderema pulchella, Marsdenia longiloba, Ricinocarpos speciosus, Zieria collina	E. grandis communities tend to rainforest understorey (grasses usually sparse). There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll. E. saligna communities tend to grassy understorey. Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. A grassy system is especially important for species such as the eastern bristlebird and its habitat.	Mostly restricted to southern border parts of bioregion and Mt Tamborine.
12.8.8a	As per 12.8.8	As per 12.8.8	Pre-clear 67ha; Remnant 22ha (32%)	Vegetation comprises Eucalyptus siderophloia, E. microcorys, Corymbia intermedia +/- Eucalyptus propinqua, E. carnea open forest on Cainozoic igneous rocks. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks. Drier environs than 12.8.8.	As per 12.8.8	As per 12.8.8	Mostly restricted to ridges and slopes at moderate to high altitude southern border parts of bioregion.
12.8.14	Least concern	Pre-clear 77,000ha; Remnant 45,000ha	Pre-clear 747ha; Remnant 127ha (17%)	Eucalyptus eugenioides, E. biturbinata, E. melliodora +/- E. tereticornis, Corymbia intermedia, E. crebra open forest. Allocasuarina torulosa is a common understorey species. Localised occurrences of Eucalyptus laevopinea, E. quadrangulata and E. banksii may occur. Occurs on Cainozoic igneous rocks, especially basalt. Typically lower rainfall than other moist RE types, but prefers sheltered slopes and gullies where it maintains moist environment.	Habitat for threatened plant species including Sophora fraseri, Marsdenia longiloba	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse. The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas.	This RE contains a number of rare and threatened plant species (e.g., Plectranthus suaveolens and Sophora fraseri) which require appropriate fire management.
12.8.20	Of concern	Pre-clear 10,000ha; Remnant 7,000ha	Pre-clear 722ha; Remnant 667ha (92%)	Woodland to low open woodland complex. Canopy trees include Eucalyptus racemosa subsp. racemosa, E. dura, Corymbia trachyphloia, E. carnea, Allocasuarina littoralis, Acacia spp. and Lophostemon confertus. Occurs on Cainozoic igneous rocks, especially rhyolite.	Habitat for threatened plant species including Grevillea linsmithii, Arundinella grevillensis, Westringia sericea, Eucalyptus kabiana, Leionema gracile and near threatened species including Hibbertia hexandra, Melaleuca groveana, Comesperma breviflorum and Eucalyptus curtisii. Habitat for plants with restricted or disjunct distributions e.g. Grevillea whiteana.	Fires that are too frequent will eliminate obligate seeding species. Fire frequency should be such as to allow trees to reach maturity and produce viable seed.	Frequent fire can favour fire-tolerant species at the expense of fire-sensitive species.
12.9-10.1	Of concern	Pre-clear 10,000ha; Remnant 5,000ha	Pre-clear 2569ha; Remnant 627ha (24%)	Tall open forest. Canopy species include Eucalyptus resinifera, E. grandis, E. robusta, Corymbia intermedia +/- E. microcorys, Melaleuca quinquenervia, Syncarpia glomulifera subsp. glomulifera and Lophostemon confertus. Occurs on Cainozoic and Mesozoic sediments.	Habitat for threatened plant species including Boronia keysii.	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. A grassy system is especially important for species such as the eastern bristlebird and its habitat. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse.	Subject to increasing pressure from rural subdivision. Restricted to wet coastal lowlands of the Sunshine Coast from Eudlo to Como. Contains a number of rare and threatened plant species (e.g., Boronia keysii) which require appropriate fire management.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.9-10.4	Least concern	Pre-clear 52,000ha; Remnant 20,000ha	Pre-clear 7881ha; Remnant 1611ha (20%)	Eucalyptus racemosa subsp. racemosa woodland to open forest. Other species can include Angophora leiocarpa, Eucalyptus seeana, E. siderophloia, Corymbia intermedia, E. tindaliae, with Lophostemon suaveolens, Melaleuca quinquenervia, E. tereticornis common on lower slopes. Occurs on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces.	Habitat for threatened plant species including Macrozamia pauli-guilielmi and Acacia attenuata. The inland occurrences in particular support disjunct species assemblages of conservation importance for example Grevillea banksii.	The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas. Burning should aim to produce fine scale mosaics of unburnt areas. Variability in season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics.	The RE has been extensively cleared and fragmented in lowland areas. Coastal lowlands and some sub coastal outliers around Esk and west of Maryborough.
12.9-10.7a	Of concern	12.9-10.7: Pre-clear 248,000ha; Remnant 41,000ha	Pre-clear 1636ha; Remnant 228ha (14%)	Eucalyptus siderophloia, Corymbia intermedia +/- E. tereticornis and Lophostemon confertus open forest. Occurs on Cainozoic and Mesozoic sediments in near coastal areas. This regional ecosystem is a coastal mesic variant of 12.9-10.7.	Potential habitat for threatened species: Callitris baileyi, Graptophyllum reticulatum, Melaleuca formosa, Melaleuca irbyana, Paspalidium grandispiculatum, Plectranthus habrophyllus, Polianthion minutiflorum, Zieria inexpectata	The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas. Burning should aim to produce fine scale mosaics of unburnt areas. Variability in season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics.	Extensively cleared for pasture.
12.9-10.14	Least concern	Pre-clear 29,000ha; Remnant 13,000ha	Pre-clear 17235ha; Remnant 7179ha (42%)	Eucalyptus siderophloia, E. microcorys, Corymbia intermedia +/- Eucalyptus propinqua, E. carnea open forest on Cainozoic igneous rocks. Occurs on Cainozoic igneous rocks and areas subject to local enrichment from Cainozoic igneous rocks.	Potential habitat for threatened species: Acacia attenuata, Boronia rivularis, Caustis blakei subsp. macrantha, Eucalyptus taurina, Leptospermum luehmannii, Phaius australis, Zieria bifida	This RE may contain a high number of rare and threatened plant species which require appropriate fire management. Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse.	Extensively cleared for horticulture, exotic pine plantations and rural residential development in some locations. The clearing has also resulted in fragmentation. Mainly coastal.
12.9-10.14a	As per 12.9-10.14	As per 12.9-10.14	Pre-clear 3819ha; Remnant 1414ha (37%)	Vegetation comprises Open forest of Eucalyptus grandis, Lophostemon confertus, E. microcorys, Syncarpia glomulifera subsp. glomulifera +/- E. pilularis. Occurs on Cainozoic and Mesozoic sediments especially sandstone in wet gullies and southern slopes.	Potential habitat for threatened species: Acacia attenuata, Boronia rivularis, Caustis blakei subsp. macrantha, Eucalyptus taurina, Leptospermum luehmannii, Phaius australis, Zieria bifida	As per 12.9-10.14	Sunshine Coast and inland to Peachester. Minor occurrence on NSW border south of Mt Barney. Extensively cleared for horticulture, exotic pine plantations and rural residential development in some locations.
12.9-10.17a	Least concern	12.9-10.17: Pre-clear 65,000ha; Remnant 31,000ha	Pre-clear 203ha; Remnant 116ha (57%)	Lophostemon confertus or L. suaveolens dominated open forest usually with emergent Eucalyptus and/or Corymbia species. Occurs in gullies and southern slopes on Cainozoic and Mesozoic sediments. Other species that may be present locally include Corymbia intermedia, C. trachyphloia, Eucalyptus tereticornis, E. biturbinata, E. moluccana, E. longirostrata, E. fibrosa subsp. fibrosa and Angophora leiocarpa. Lophostemon confertus or Whipstick Lophostemon confertus often present in gullies and as a sub-canopy or understorey tree. Mixed understorey of grasses, shrubs and ferns.	Potential habitat for threatened species: Acacia acrionastes, Arundinella grevillensis, Cupaniopsis tomentella, Gonocarpus hirtus, Grevillea linsmithii, Leionema obtusifolium, Macrozamia pauli-guilielmi, Marsdenia coronata, Marsdenia longiloba, Notelaea.	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse. The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas.	This RE may contain a high number of rare and threatened plant species which require appropriate fire management.
12.9-10.17d	Least concern	12.9-10.17: Pre-clear 65,000ha; Remnant 31,000ha	Pre-clear 3418ha; Remnant 1932ha (57%)	Open forest generally containing Eucalyptus siderophloia, E. propinqua or E major, Corymbia intermedia. Other characteristic species include Lophostemon confertus, Eucalyptus microcorys and E. acmenoides or E. portuensis. Other species that may be present locally include Corymbia trachyphloia subsp. trachyphloia, C. citriodora subsp. variegata, E.	Potential habitat for Threatened species: Acacia acrionastes, Arundinella grevillensis, Cupaniopsis tomentella, Gonocarpus hirtus, Grevillea linsmithii, Leionema obtusifolium, Macrozamia pauli-	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low	This RE may contain a high number of rare and threatened plant species which require appropriate fire management.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				longirostrata, E. carnea, E. moluccana and occasional vine forest species. Hills and ranges on Cainozoic and Mesozoic sediments.	guilielmi, Marsdenia coronata, Marsdenia longiloba, Notelaea.	to moderate intensity fires will create the disturbance required to keep the understorey diverse. The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas.	
12.11.2	Least concern	Pre-clear 20,000ha; Remnant 14,000ha	Pre-clear 4748ha; Remnant 3530ha (74%)	Tall open forest with vine forest understorey ('wet sclerophyll'). Canopy species include Eucalyptus saligna subsp. saligna or E. grandis, E. microcorys, Corymbia intermedia and Lophostemon confertus. Characteristic understorey species include Ackama paniculosa, Pittosporum undulatum, Synoum glandulosum subsp. glandulosum and Cryptocarya microneura. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for threatened flora species including Cyperus semifertilis.	There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll.	
12.11.3	Least concern	Pre-clear 161,000ha; Remnant 108,000ha	Pre-clear 13333ha; Remnant 9332ha (70%)	Eucalyptus siderophloia and E. propinqua open forest +/- E. microcorys, Lophostemon confertus, Corymbia intermedia, E. biturbinata, E. acmenoides, E. tereticornis, E. moluccana, Angophora leiocarpa, Syncarpia verecunda with vine forest species and E. grandis or E. saligna in gullies. Eucalyptus pilularis and E. tindaliae sometimes present e.g. mid D'Aguilar Range, Conondale Range. Occurs predominantly on hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for threatened plant species including Corchorus cunninghamii, Marsdenia coronata, Sophora fraseri.	May contain a high number of rare and threatened plant species (e.g., Acomis acoma, Corchorus cunninghamii, Marsdenia coronata and Sophora fraseri) which require appropriate fire management. Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. A grassy system is especially important for species such as the eastern bristlebird and its habitat. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse.	This type develops a dense understorey of Araucarian vine forest species in the absence of fire. Subject to weed invasion by Lantana camara.
12.11.3a	As per 12.11.3	As per 12.11.3	Pre-clear 137ha; Remnant 114ha (83%)	As per description for 12.11.3. Vegetation comprises Lophostemon confertus +/- Eucalyptus microcorys, E. carnea, E. propinqua, E. major, E. siderophloia woodland. Occurs in gullies and exposed ridges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for threatened flora species including Corchorus cunninghamii, Marsdenia coronata, Sophora fraseri.	As per 12.11.3	As per 12.11.3
12.11.3b	As per 12.11.3	As per 12.11.3	Pre-clear 127ha; Remnant 101ha (80%)	Vegetation comprises Eucalyptus pilularis tall open forest. Other frequently occurring species include Eucalyptus microcorys, E. saligna, E. siderophloia, E. carnea, Corymbia intermedia and E. propinqua. Occurs on higher altitude (>300m) subcoastal hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for threatened plant species including Corchorus cunninghamii, Marsdenia coronata, Sophora fraseri.	As per 12.11.3	Mid D'Aguilar Range and Conondale Range. Subject to weed invasion by Lantana camara.
12.11.9	Of concern	Pre-clear 11,000ha; Remnant 8,000ha	Pre-clear 1150ha; Remnant 1101ha (96%)	Open forest to woodland with Eucalyptus tereticornis. Includes both E. tereticornis subsp. tereticornis and E. tereticornis subsp. basaltica. Other canopy species include Eucalyptus biturbinata, E. melliodora, Corymbia intermedia, E. longirostrata, E. eugenioides, Allocasuarina torulosa, E. moluccana, E. saligna, E. siderophloia and Angophora subvelutina. Occurs on ridges and upper slopes especially at higher altitudes on	Potential habitat for threatened species: Papillilabium beckleri	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. A grassy system is especially important for species such as the eastern bristlebird and its habitat. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to	May contain a high number of rare and threatened plant species which require appropriate fire management. Often occurs as localised patches on ridge tops.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.		moderate intensity fires will create the disturbance required to keep the understorey diverse.	
12.11.9x1	As per 12.11.9	As per 12.11.9	Pre-clear 20ha; Remnant 20ha (100%)	Vegetation comprises Eucalyptus montivaga open forest. Other canopy species can include Corymbia trachyphloia, E. acmenoides, Syncarpia glomulifera subsp. glomulifera and C. intermedia. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Altitude >500m.	Habitat for threatened plant species Daviesia discolor.	As per 12.11.9	As per 12.11.9
12.11.14	Of concern	Pre-clear 120,000ha; Remnant 30,000ha	Pre-clear 3642ha; Remnant 384ha (11%)	Eucalyptus crebra, E. tereticornis, Corymbia intermedia grassy woodland. Other species including Eucalyptus melanophloia, Corymbia clarksoniana, C. erythrophloia, C. tessellaris, E. siderophloia, Angophora spp. May be present in low densities or in patches. Mid-layer generally sparse but can include low trees such as Vachellia bidwillii, Capparis spp., Dodonaea triquetra, Alphitonia excelsa and Xanthorrhoea spp. Occurs on mid and lower slopes on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Potential habitat for threatened species: Cycas megacarpa, Macrozamia longispina, Plectranthus omissus	Control of weeds is a major focus of planned burning in most areas. Maintain ground litter and fallen timber habitats by burning only with sufficient soil moisture. Burning should aim to produce fine scale mosaics of unburnt areas.	
12.11.27	Endangered	Pre-clear 9,000ha; Remnant 2,000ha	Pre-clear 32ha; Remnant 32ha (100%)	Eucalyptus racemosa subsp. racemosa and/or E. seeana and Corymbia intermedia woodland. Other characteristic species include E. siderophloia, Angophora leiocarpa, C. trachyphloia subsp. trachyphloia and rarely E. pilularis. Melaleuca quinquenervia may be present and at times becomes locally co-dominant. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics, typically at low altitude (<60 metres) in near coastal situations.	Habitat for threatened flora species including Sophora fraseri.	The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas. Careful thought should be given to maintaining ground litter and fallen timber habitats by burning only with sufficient soil moisture. Burning should aim to produce fine scale mosaics of unburnt areas. Variability in season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics.	Extensively cleared and fragmented due to urban development. Mostly between Brisbane and Gold Coast and minor occurrences in the Caboolture area.
12.12.2	Least concern	Pre-clear 33,000ha; Remnant 22,000ha	Pre-clear 12284ha; Remnant 9322ha (76%)	Eucalyptus pilularis tall open forest with shrubby understorey. Other canopy species include Syncarpia verecunda, Angophora woodsiana, Eucalyptus microcorys, E. resinifera, E. tindaliae, E. propinqua and E. saligna. Occurs on Mesozoic to Proterozoic igneous rocks.	Potential habitat for threatened species: Corunastylis cranei, Phaius australis, Plectranthus leiperi, Plectranthus torrenticola	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. High fuel loads develop in a short period of time owing to bark shedding. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse.	This 'endangered' RE may contain a high number of rare and threatened plant species which require appropriate fire management.
12.12.12	Of concern	Pre-clear 236,000ha; Remnant 51,000ha	Pre-clear 9771ha; Remnant 1032ha (11%)	Eucalyptus tereticornis, Corymbia intermedia, E. crebra open forest to woodland. Other species present can include Eucalyptus melanophloia, Corymbia tessellaris, Angophora subvelutina, A. leiocarpa, C. clarksoniana (central and northern parts) and E. siderophloia with Melaleuca quinquenervia, Lophostemon suaveolens near drainage lines in moister areas. Occurs on	Potential habitat for threatened species: Cycas megacarpa, Paspalidium grandispiculatum, Plectranthus omissus, Xylosma ovata	The fire regime should maintain a mosaic of grassy and shrubby understoreys. Control of weeds is a major focus of planned burning in most areas. Burning should aim to produce fine scale mosaics of unburnt areas. Variability in season and fire intensity is important, as well as spot ignition in cooler or moister periods to encourage mosaics.	Extensively cleared for pasture.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
				Mesozoic to Proterozoic igneous rocks usually on lower slopes, especially granite lowlands and basins.		Contains palustrine wetland (e.g. in swales).	
12.12.14	Of concern	Pre-clear 5,000ha; Remnant 3,000ha	Pre-clear 1539ha; Remnant 1151ha (75%)	Woodland to open forest characterised by Eucalyptus racemosa subsp. racemosa, Angophora woodsiana, Corymbia gummifera, Syncarpia spp., Eucalyptus helidonica or E. acmenoides and Lophostemon confertus. Other canopy species include Corymbia trachyphloia subsp. trachyphloia, E. carnea, E. tindaliae, E. exserta, E. resinifera and E. microcorys. Usually occurs on rocky near coastal areas on Mesozoic to Proterozoic igneous rocks.	Potential habitat for Threatened species: Corunastylis cranei, Gonocarpus effusus, Leucopogon recurvisepalus, Melaleuca williamsii subsp. fletcheri, Plectranthus omissus, Plectranthus torrenticola, Pomaderris crassifolia.	Avoid repeated low intensity fires. Fires that are too frequent will eliminate obligate seeding species. Fire frequency should be such as to allow trees to reach maturity and produce viable seed.	Comparable to RE 12.12.9 but occurs in higher rainfall areas.
12.12.15	Least concern	Pre-clear 85,000ha; Remnant 62,000ha	Pre-clear 16068ha; Remnant 11620ha (72%)	Corymbia intermedia +/- Eucalyptus propinqua, E. siderophloia, E. microcorys, Lophostemon confertus. Other canopy species include E. acmenoides, E. moluccana, Angophora subvelutina and occasional vine forest species. Patches of Eucalyptus pilularis sometimes present. Occurs on Mesozoic to Proterozoic igneous rocks.	Habitat for threatened flora species including Marsdenia coronata.	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse. There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll.	Coastal and sub-coastal hills and ranges. This RE may contain a high number of rare and threatened plant species which require appropriate fire management. Often develops understorey of Araucarian vine forest species in absence of fire.
12.12.15a	As per 12.12.15	As per 12.12.15	Pre-clear 5692ha; Remnant 2950ha (52%)	Vegetation includes Eucalyptus grandis and/or E. saligna tall open forest +/- vine forest understorey. Other canopy species include E. microcorys, E. acmenoides, Lophostemon confertus, E. siderophloia, E. propinqua, Corymbia intermedia. Occurs in wet gullies on Mesozoic to Proterozoic igneous rocks.	As per 12.12.15	As per 12.12.15	As per 12.12.15 Often develops understorey of Araucarian vine forest species in absence of fire.
12.12.15b	As per 12.12.15	As per 12.12.15	Pre-clear 531ha; Remnant 501ha (94%)	As per description for 12.12.15. Vegetation includes Lophostemon confertus open forest +/- Eucalyptus microcorys, E. siderophloia, E. carnea, E. propinqua and vine forest species often present in understorey. Occurs in gullies and exposed ridges on Mesozoic to Proterozoic igneous rocks often amongst vine forest. (BVG1M: 8a)	As per 12.12.15	As per 12.12.15	As per 12.12.15
12.12.23	Least concern	Pre-clear 31,000ha; Remnant 15,000ha	Pre-clear 362ha; Remnant 282ha (78%)	Woodland to open forest generally with Eucalyptus tereticornis subsp. tereticornis or E. tereticornis subsp. basaltica +/- E. eugenioides. Other species present vary from place to place but commonly include E. crebra, Corymbia intermedia, E. acmenoides, E. biturbinata, E. longirostrata, E. melliodora, C. trachyphloia, C. citriodora subsp. Variegata, Lophostemon confertus (tree form and whipstick form), Angophora subvelutina and Allocasuarina torulosa. Occurs at higher altitudes on crests, upper slopes and elevated valleys and plains on Mesozoic to Proterozoic igneous rocks.	Potential habitat for threatened species: Eucalyptus taurina, Paspalidium grandispiculatum, Plectranthus torrenticola	Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem. High intensity fires occur periodically through time, however frequent low to moderate intensity fires will create the disturbance required to keep the understorey diverse.	May contain a high number of rare and threatened plant species which require appropriate fire management.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
Rainforest							
12.3.1a	Endangered	Pre-clear 16,000ha; Remnant 4,000ha	Pre-clear 4554ha; Remnant 1749.6ha (38%)	Vegetation communities comprise complex notophyll vine forest. Typical canopy species include Castanospermum australe, Elaeocarpus grandis, Grevillea robusta, Cryptocarya obovata, Beilschmiedia obtusifolia, Dysoxylum mollissimum subsp. molle, Pseudoweinmannia lachnocarpa, Argyrodendron trifoliolatum, Planchonella australis, Ficus watkinsiana, F. macrophylla forma macrophylla, Aphananthe philippinensis, Toona ciliata and Syzygium francisii. Emergent Eucalyptus grandis or Lophostemon confertus may occur. Waterhousea floribunda and Tristaniopsis laurina may occur on banks of stream channels. Typical sub canopy species include Cryptocarya triplinervis, Archontophoenix cunninghamiana, Endiandra pubens, Arytera divaricata, Syzygium moorei and Macadamia spp. Occurs on Quaternary alluvial plains and channels in areas of high rainfall (generally >1300mm). Riverine wetland or fringing riverine wetland.	Habitat for threatened plant species including Xanthostemon oppositifolius, Fontainea rostrata, Macadamia integrifolia and M. ternifolia. Habitat for threatened fauna species including Cyclopsitta diophthalma coxeni and Ornithoptera richmondia. Important for fruit-eating birds, many of which migrate seasonally from upland to lowland rainforest.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins. Riverine wetland or fringing riverine wetland.	Restricted to the high rainfall catchments of the Gold and Sunshine Coast hinterlands and upper Albert and Mary Rivers. Extensively cleared for agriculture and urban development. Prone to invasion by weeds such as camphor laurel Cinnamomum camphora, broad leaved pepper tree Schinus terebinthifolius, cat's claw creeper Dolichandra unguis-cati on margins and when disturbed.
12.5.13a	Endangered	12.5.13: Pre-clear 53,000ha; Remnant 5,000ha	Pre-clear 1ha; Remnant 1ha (94%)	Microphyll to notophyll vine forest +/- Araucaria cunninghamii. Characteristic species include Araucaria cunninghamii, Cupaniopsis parvifolia, Dendrocnide photinophylla, Rhodosphaera rhodanthema, Flindersia australis, F. schottiana, F. xanthoxyla, Drypetes deplanchei, Olea paniculata, Diospyros geminata, Gossia bidwillii, Excoecaria dallachyana and Vitex lignum-vitae. Argyrodendron trifoliolatum sometimes present especially in subregion 6. Occurs on remnant Tertiary surfaces especially lateritised basalt.	Habitat for threatened plant species including Alectryon ramiflorus, Sarcochilus weinthalii, Cossinia australiana.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins.	Cleared for agriculture and hoop pine plantation. Remnants can be degraded by weed infestation in conjunction with wildfire damage on margins.
12.8.3	Least concern	Pre-clear 30,000ha; Remnant 11,000ha	Pre-clear 12758ha; Remnant 1561ha (12%)	Lower altitude vine forest type. Complex notophyll vine forest. Characteristic species include Argyrodendron trifoliolatum, Olea paniculata, Castanospermum australe, Cryptocarya obovata, Ficus macrophylla forma macrophylla, Syzygium francisii, Diploglottis australis, Pseudoweinmannia lachnocarpa, Podocarpus elatus, Beilschmiedia obtusifolia, Neolitsea dealbata and Archontophoenix cunninghamiana. Occurs on Cainozoic igneous rocks, especially basalt <600m altitude.	Habitat for endemic and threatened plant species including Gossia fragrantissima, Davidsonia johnsonii, Diploglottis campbellii, Planchonella eerwah, Randia moorei, Triunia robusta, Plectranthus nitidus, Sarcochilus weinthalii, S. fitzgeraldii, S. hartmannii, Baloghia marmorata, Cassia marksiana, Corynocarpus rupestris subsp. arborescens, Niemeyera whitei, Floydia praealta, Lepiderema pulchella, Macadamia integrifolia, M. tetraphylla, Owenia cepiodora, Romnalda strobilacea, Syzygium hodgkinsoniae, S. moorei.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins.	Extensively cleared. Characteristic localities for this RE are lower parts of Lamington-Beechmont and Maleny Plateau, with low-altitude coastal examples at Burleigh Heads and Buderim.
12.8.9	Least concern	Pre-clear 13,000ha; Remnant 11,000ha	Pre-clear 4ha; Remnant 4ha (106%)	Lophostemon confertus open forest often with vine forest understorey ('wet sclerophyll'). Occurs on Cainozoic igneous rocks. Tends to occur mostly in gullies and on exposed ridges on basalt.	Potential habitat for threatened species: Eucalyptus dunnii, Mallotus megadontus	There is evidence that suggests that infrequent high intensity fires sustain the eucalypt overstorey. Wet sclerophyll has been shown to be a moving ecotone between vine forest and moist/dry sclerophyll.	Tends to occur on exposed ridges among vine forest on basalt and in gullies on lower fertility substrates such as rhyolite.

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.8.13	Of concern	Pre-clear 75,000ha; Remnant 14,000ha	Pre-clear 25ha; Remnant 1ha (4%)	Microphyll and microphyll/notophyll vine forest +/- Araucaria cunninghamii. Characteristic species include Araucaria cunninghamii, A. bidwillii, Cupaniopsis parvifolia, Dendrocnide photinophylla, Rhodosphaera rhodanthema, Flindersia australis, F. schottiana, F. xanthoxyla, Drypetes deplanchei, Olea paniculata, Diospyros geminata, Gossia bidwillii, Excoecaria dallachyana, Pleiogynium timorense (north of bioregion) and Vitex lignum-vitae. Argyrodendron trifoliolatum sometimes present especially in subregion 6. Occurs on Cainozoic igneous rocks, especially basalt.	Habitat for threatened plant species including Alectryon ramiflorus, Cossinia australiana, Sarcochilus weinthalii.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins.	Cleared for agriculture. Remnants can be degraded by weed infestation in conjunction with wildfire damage on margins.
12.9-10.16	Of concern	Pre-clear 24,000ha; Remnant 9,000ha	Pre-clear 1733ha; Remnant 1176ha (68%)	Microphyll to notophyll vine forest +/- Araucaria cunninghamii. Characteristic species include Argyrodendron sp. (Kin Kin W.D.Francis AQ81198), Araucaria cunninghamii, Agathis robusta, Backhousia myrtifolia, Cupaniopsis parvifolia, Dendrocnide photinophylla, Rhodosphaera rhodanthema, Flindersia australis, F. xanthoxyla, Drypetes deplanchei, Olea paniculata, Diospyros geminata, Gossia bidwillii, Excoecaria dallachyana and Vitex lignum-vitae. Archontophoenix cunninghamiana often present in gully floors. Occurs on Cainozoic and Mesozoic sediments.	Habitat for threatened plant species including Alectryon ramiflorus, Planchonella eerwah, Plectranthus omissus, Sarcochilus weinthalii, Cupaniopsis shirleyana, C. tomentella and near threatened species including Hernandia bivalvis. Agathis robusta has a restricted distribution in the bioregion.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins.	Extensively cleared for pasture and cropping. Remnants can be degraded by weed infestation in conjunction with wildfire damage on margins.
12.11.1	Least concern	Pre-clear 14,000ha; Remnant 12,000ha	Pre-clear 4480ha; Remnant 4088ha (91%)	Evergreen notophyll vine forest and/or Lophostemon confertus closed forest. Archontophoenix cunninghamiana often present in gully floors. The plant families Lauraceae, Myrtaceae and Elaeocarpaceae are characteristic of the type. Occurs in gullies on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for near threatened plant species including Gossia inophloia.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance. Remnants may be limited by frequent fire at the margins.	Characteristic localities are Conondale Range and Mount Glorious below the Tertiary basalt cap.
12.11.10	Least concern	Pre-clear 87,000ha; Remnant 39,000ha	Pre-clear 6425ha; Remnant 2576ha (40%)	Notophyll and notophyll/microphyll vine forest +/- Araucaria cunninghamii. Characteristic species include Argyrodendron trifoliolatum, Argyrodendron sp. (Kin Kin W.D.Francis AQ81198), Backhousia subargentea, Dissiliaria baloghioides, Brachychiton discolor, Beilschmiedia obtusifolia, Diospyros pentamera, Grevillea robusta, Gmelina leichhardtii and Ficus macrophylla forma macrophylla. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics.	Habitat for threatened plant including Fontainea rostrata, Planchonella eerwah, Macadamia integrifolia, M. tetraphylla and near threatened species including Arytera dictyoneura.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance.	Widely distributed along coastal and sub coastal ranges such as Darlington and D'Aguilar Ranges, upper Mary Valley, Woowoonga Range and Bania.
12.12.1	Of concern	Pre-clear 9,000ha; Remnant 8,000ha	Pre-clear 5386ha; Remnant 4055ha (75%)	Notophyll and notophyll/microphyll vine forest, sometimes with Archontophoenix cunninghamiana and/or Lophostemon confertus closed forest. The plant families Lauraceae, Myrtaceae and Elaeocarpaceae are diagnostic of the type and Pleioluma queenslandica is common in the northern half of the bioregion. Araucaria cunninghamii is often present on margins. Occurs in gullies on Mesozoic to Proterozoic igneous rocks especially granite and rhyolite.	Potential habitat for Threatened species: Graptophyllum reticulatum, Jasminum jenniae, Macadamia integrifolia, Macadamia ternifolia, Mallotus megadontus, Papillilabium beckleri, Pararistolochia praevenosa, Plectranthus torrenticola, Romnalda strobilacea	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance.	

Regional Ecosystem	Conservation class (NCA)	Estimated extent (SEQ)	Estimated extent (SC)	Description and typical species	Habitat and threatened species	Bushfire and wetland characteristics and processes	Range restrictions and threatening processes
12.12.16	Least concern	Pre-clear 34,000ha; Remnant 24,000ha	Pre-clear 3869ha; Remnant 1547ha (40%)	Notophyll vine forest. Characteristic species include Araucaria bidwillii, A. cunninghamii, Argyrodendron trifoliolatum, Argyrodendron sp. (Kin Kin W.D.Francis AQ81198), Backhousia subargentea, Brachychiton discolor, Beilschmiedia obtusifolia, Diospyros pentamera, Grevillea robusta, Gmelina leichhardtii, Ficus macrophylla forma macrophylla and Sloanea woollsii. Eucalyptus spp. especially E. siderophloia, E. propinqua and E. grandis may be present as emergents. Occurs on Mesozoic to Proterozoic igneous rocks.	Habitat for threatened plant species including Sarcochilus weinthalii, Triunia robusta, Graptophyllum reticulatum, Planchonella eerwah, Baloghia marmorata, Cassia marksiana, Floydia praealta, Fontainea rostrata, Macadamia integrifolia, M. tetraphylla, Medicosma elliptica, Phyllanthus brassii, Samadera bidwillii, Xanthostemon oppositifolius.	Fire sensitive and not normally flammable. Some preliminary work suggests rainforest seedling germination from planned burning activities will assist the establishment of seedlings in newly burnt areas, especially due to smoke. There may be issues with lantana and other weeds from fire and other disturbance.	Characteristic localities for RE include Mount Mee and Yandina areas in south and Bulburin, Kroombit Tops and Mount Robert in north of bioregion.

ANNEX VI *Community Strategy 2019–2041*

ANNEX VII *Environment and Liveability Strategy 2017*

ANNEX VIII *Regional Economic Development Strategy 2013–2033*