PROTECTED COASTAL

woodland

VEGETATION TYPE 3e

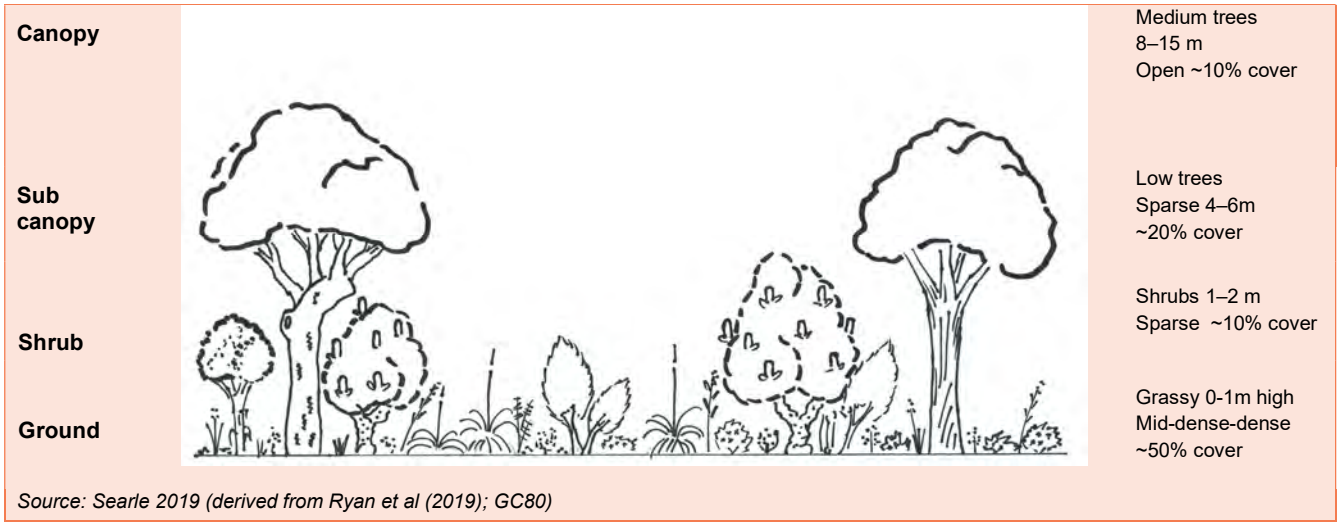
Regional Ecosystem: 12.2.6

Scribbly Gum (*Eucalyptus racemosa*) Woodland on Coastal Sands

COMMUNITY STRUCTURE

Vegetation type (VT) 3e is typically a low woodland from 8-15m high, with an open canopy (10-30% cover shading underlying plants).

Diagnostic trees include Scribbly Gum (*Eucalyptus racemosa*), usually with Swamp Mahogany (*Eucalyptus robusta*). Wallum Banksia (*Banksia aemula*) is conspicuous in the low tree and shrub layer to 6m high.



Source: Searle 2019 (derived from Ryan et al (2019); GC80)

The sub-canopy and shrub layers below the canopy are usually sparse and comprised of small-leaved heathland plants (*i.e. Leptospermum trinervum, L. polygalifolium, Baeckea frutescens, Monotoca sp (*Fraser Island) *etc*).

The ground layer typically forms a mosaic of grassland and more open areas, which have a conspicuous layer of leaves and bark. Vegetation in the ground layer ranges in height and is dominated by grasses and the grass tree (*Xanthorrhoea fulva*), and open areas of leaf litter.

Characteristic plant species

Approximately **15** native plants species have been recorded for this vegetation type. Characteristic plant species are listed below. Dominant (most numerous) species are shaded.

Indicates species is a preferred koala food tree*

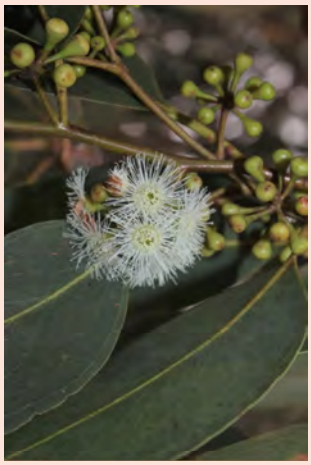
GBC — Indicates species is a Glossy Black-Cockatoo feed tree species

CWS — Indicates species is a City-wide significant species

* It is noted that in addition to preferred food trees, koalas utilise a range of eucalypt and non-eucalypt tree species for supplemental feeding and other uses such as shelter. These other species are also important and necessary features of koala habitat.

CANOPY

Upper layer of vegetation exposed to sunlight which creates a canopy that shades lower layers.



Scribbly Gum

Eucalyptus racemosa

Swamp Mahogany

Eucalyptus robusta

SUB-CANOPY

Tree layer below canopy.

Wallum Banksia

Banksia aemula

Prickly-leaved Paperbark

Melaleuca nodosa

Fraser Island Broom Heath

Monotoca sp. (Fraser Island P. Baxter 777)

Paperbark Tea Tree

Leptospermum trinervium

SHRUB LAYER

Middle layer of vegetation usually made up of small trees and woody shrubs.

Fraser Island Broom Heath

Montoca sp. (Fraser Island P. Baxter 777)

Weeping Baeckea

Baeckea frutescens

Wild May

Leptospermum polygalifolium

Forest Rose

Boronia rosmarinifolia

GROUND LAYER AND VINES

Lowest layer of vegetation. Plant types can include grasses; graminoids (non-woody plants with a grass-like morphology); ferns; forbs (non-woody, broad-leaved, flowering plants) and vines (where present) may extend upwards into the canopy.

Bracken

Pteridium esculentum

FERN

Pomax

Pomax umbellata

FORB

Long-leaved Mat-rush

Lomandra longifolia

GRAMINOID

Homoranthus virgatus

SHRUB

CITY OF GOLDCOAST.

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Wallum Grasstree

Xanthorrhoea fulva

GRASSTREE

Midyim Berry

Austromyrtus dulcis

SHRUB

Common Silkpod

Parsonsia straminea

VINE (OCCATIONAL)

City-wide significant plant species

CWS

The City of Gold Coast recognises species which are locally significant as City-wide significant (CWS) species. These species are important because they may be threatened, restricted to the Gold Coast, or at the edge of their geographic range. There are no additional CWS plant species recorded in this vegetation type.

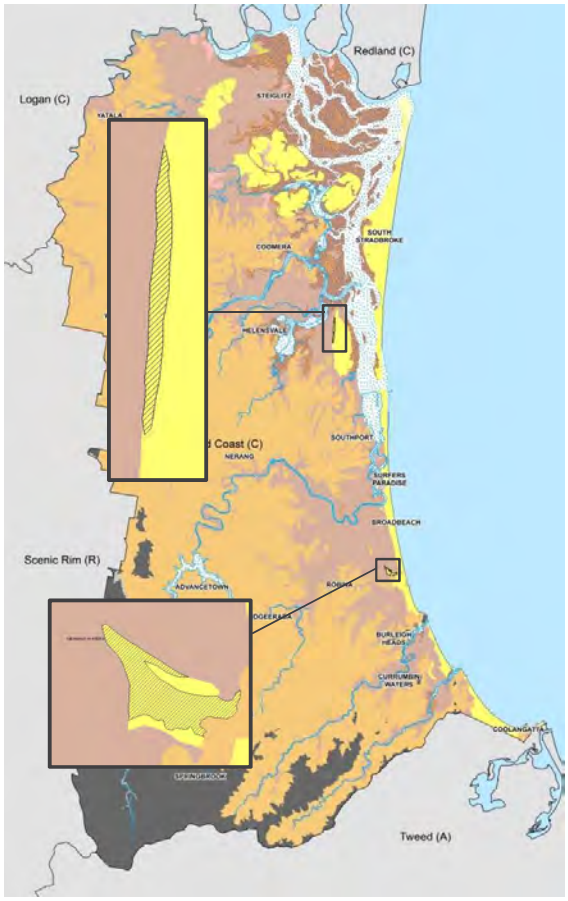
CITY OF GOLDCOAST.

OCCURRENCE

Native plants occur in vegetation communities, which are consistently associated with a particular soil type, landform (shape of the land, e.g. hills or plains) aspect (position on a slope in relation to the sun) and climate.

Scribbly Gum Woodland with heathy understorey on coastal sand deposits is a naturally restricted vegetation type, previously occurring patchily along the coastal strip between Paradise Point and Coolangatta. Patches large enough to be mapped occurred at Coombabah and Mermaid Waters. On the Gold Coast, this community has been mostly cleared for coastal development. It remains only in small areas around Pine Ridge Conservation Park and at small coastal parklands such as the Cathy Crawford Picnic Area within Pizzey Park at Miami. This community occurs on sandy infertile soils on deep sand dunes near the coast.

Historic distribution of Vegetation Type 3e



LEGEND

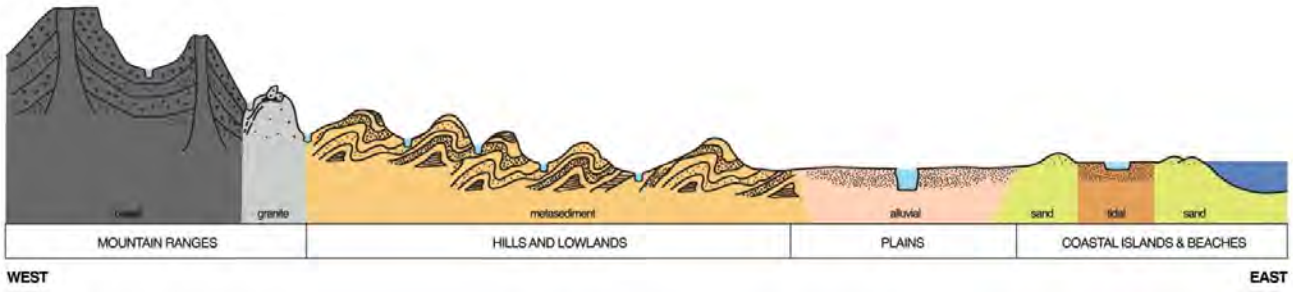
Vegetation Type 3e | Ocean | Major Waterways

COMMON LANDFORMS AND GEOLOGY OF THE GOLD COAST

	LAND FORM	GEOLOGY (soils and rocks)	AGE
	Tidal flats and beaches (subject to tidal inundation)	Water logged, saline muds, clays and sands	Youngest
	Coastal dunes and beach ridges (not subject to tidal inundation)	**Coastal sands**	
	Flood plains, river and creek flats	Alluvial soils (soils moved or shaped by water)	
	Level or gently undulating plains	Sandy or loamy soils	
	Mountain ranges, hills, lowlands and coastal headlands	Basalt (volcanic) rocks	
	Undulating	Sedimentary rocks	
	Mountain ranges, hills and lowlands	Metasediment rocks*	
	Mountain ranges, hills, lowlands and coastal headlands	Granite (volcanic) rocks	Oldest

Conceptual cross section of Gold Coast

Showing typical location of most common geology and land forms (concept only, not to scale)



*** Metasediment rocks**

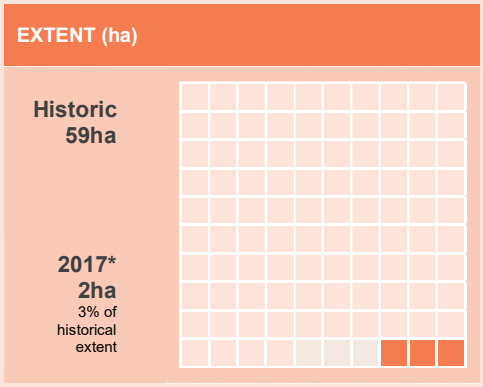
The most common underlying geology on the Gold Coast is metasediment rocks. Metasediment rocks are a type of metamorphic rock (rock transformed by heat and pressure). Originally these rocks were sedimentary rocks which were formed on the ocean floor through the deposition and solidification of sediment. These sedimentary rocks were subsequently buried underneath other rocks and subjected to high pressures and temperatures, causing the rock to recrystallize. This recrystallization process is known as metamorphosis, hence the term metamorphic rocks. About 300 million years ago these metamorphic rocks were pushed upward by geologic processes, creating much of the ranges, hills and lowlands on the Gold Coast.

2017 EXTENT AND CONSERVATION STATUS

Gold Coast

The current extent* of this vegetation type on the Gold Coast is only 2 hectares.

1 HECTARE (HA) = 2.46 ACRES ≅ THE SIZE OF AN INTERNATIONAL RUGBY FIELD

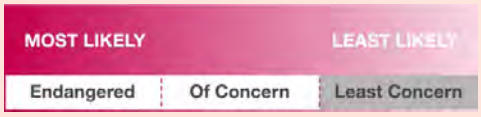


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.2.6) as being '**Least Concern**'.

LIKELIHOOD OF BECOMING EXTINCT (in QLD) due to biodiversity loss/degradation



USEFUL RESOURCES

City of Gold Coast website: Environmental weeds and invasive plants.

Find out more about regional ecosystems at the Queensland Government Regional Ecosystems webpage.

CREDITS

Content – ngh Environmental and Jason Searle.
Vegetation Type Photo – Lui Weber ©
Unless otherwise noted all other photos – Glenn Leiper ©

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THREATS

Scribbly Gum Woodland with heathy understorey on coastal sand deposits only remains in a few small parkland areas in Gold Coast City, and is threatened by direct development for urban infrastructure in these parks, and by issues associated with fragmentation and urbanisation, including dumping, weed colonisation, gradual decline from wind and excessive drying on exposed margins, lack of natural recruitment, etc..

About common threats

Clearing
Native vegetation is protected by Federal, State and local legislation. However, with increasing population growth in the region, Southeast Queensland is experiencing large amounts of vegetation clearing, particularly in areas designated for urban development. Protecting native vegetation on your property is one of the most beneficial things you can do to protect wildlife and the natural environment.

Weeds
Environmental weeds are the second biggest threat to our natural environment after land clearing. Environmental weeds (introduced plants that have naturalised and are invading our bushland) degrade our natural environment by:

- out competing native plant species for available nutrients and light
- taking over and transforming native landscapes often leading to local plant or animal extinctions and loss of biodiversity
- reducing the availability of food and other resources for many native animals whilst sometimes benefiting pest animals
- increasing the risk of destructive wildfire
- often being toxic to people and animals.

Fire
Very broadly, vegetation is either adapted to fire or fire sensitive. Fire can become a threat if:

- it extends into vegetation types which should not be burnt e.g. rainforest
- the frequency and/or intensity of the fire is too high
- the area burnt is too large.

Grazing
The grazing of animals like cattle, horses, goats and feral animals such as deer can cause trampling or loss of diversity of seedlings and compact soil, preventing natural regeneration.

Collecting
Unethical and illegal collection of plant specimens in the wild poses a serious threat to some species, particularly orchids, grass trees and epiphytes.

Climate change
Changes in temperature and rainfall can have significant effects on our city's vegetation. For example, without consistent rainfall, areas become drier, potentially resulting in higher fire frequency and/or intensity, which some plants and vegetation communities won't be able to tolerate. Plants (and animals) need available space to migrate as conditions change, with high altitude species at the greatest risk as there is nowhere suitable for them to go. Warmer conditions may also provide the right habitat for a greater variety of weeds. As sea levels rise, salt water moves further upstream and vegetation also becomes inundated.