EUCALYPT

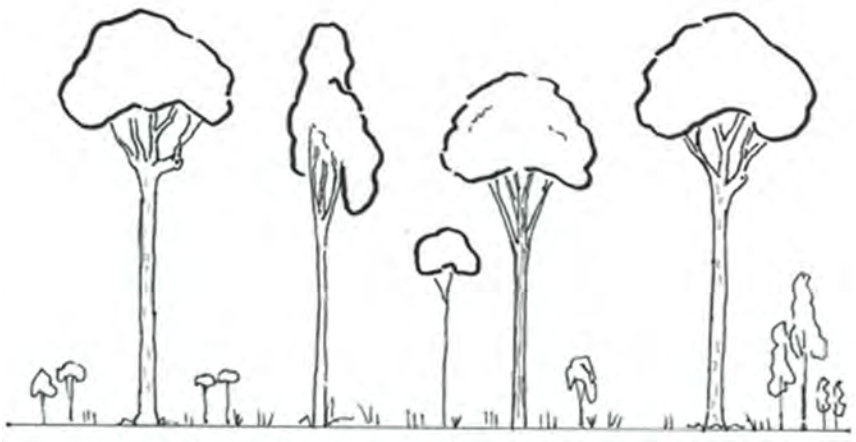
VEGETATION TYPE 3d

Regional Ecosystem: 12.11.27

Scribbly Gum (*Eucalyptus racemosa*)
Woodland on Metasediments

COMMUNITY STRUCTURE

Scribbly Gum Woodland on metasediments is typically a woodland with an open canopy (20-50% cover) shading underlying plants. Scribbly Gum (*Eucalyptus racemosa*) as the dominant tree in the canopy layer, often together with lower numbers of Tindale's Stringybark (*E. tindaliae*), Pink Bloodwood (*Corymbia intermedia*) and/or Narrow-leaved Red Gum (*E. seeana*). A sparse lower tree layer is also present, typically including Black She-oak (*Allocasuarina littoralis*), Pink Bloodwood (*Corymbia intermedia*) and Swamp Box (*Lophostemon suaveolens*).

Canopy		Large trees 17 – 25 m Woodland 20-50% cover
Sub canopy		Medium trees 8 - 15m Sparse 5-10% cover
Shrub		Shrubs 1 – 4 m Sparse 10-25% cover
Ground		Grass 0 – 1m high Sparse 30-60 % cover

Source: Searle, 2019 (derived from GC55; GC72; GC108)

The shrub layer is often sparse and comprised mainly of saplings of the higher trees present. The ground cover is dominated by a variety of native grasses, and may be sparse to mid-dense.

Characteristic plant species

Approximately **34 native plants** species have been recorded for this vegetation type. Characteristic plant species for this vegetation type 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

Queensland White Stringybark

Eucalyptus tindaliae

Pink Bloodwood

Corymbia intermedia

Smooth-barked Apple

Angophora leiocarpa

Narrow-leaved Red Gum

Eucalyptus seeana

SUB-CANOPY

Tree layer below canopy

Swamp Box

Lophostemon suaveolens

Pink Bloodwood

Corymbia intermedia

Black She-oak

Allocasuarina littoralis

SHRUB LAYER

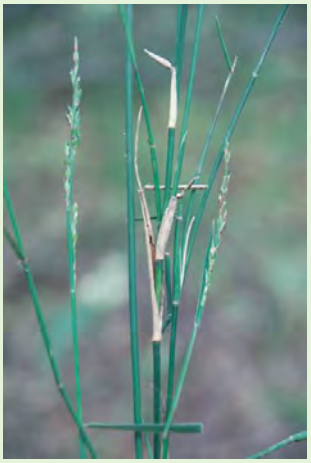
Middle layer of vegetation usually made up of small trees and woody shrubs

Swamp Box

Lophostemon suaveolens

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 which may extend upwards into the canopy.



Wiry Panic
Entolasia stricta
GRASS (TUSSOCK)

Blady Grass
Imperata cylindrica
GRASS

Barbed Wire Grass
Cymbopogon refractus
GRASS

Poverty Grass
Eremochloa bimaculata
GRASS

Broad-leaved Mat Rush
Lomandra laxa
GRAMINOID

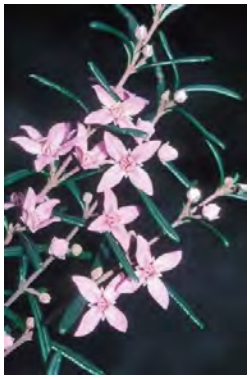
Cockatoo Grass
Alloteropsis semialata
GRASS (TUSSOCK)

City-wide significant plant species

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. In addition to characteristic species identified above as CWS species, the following CWS plant species may also be present in this vegetation type.

Tall Sword-sedge
Gahnia clarkei
SEDGE

Poor Man's Gold
Gompholobium virgatum var. virgatum
SHRUB



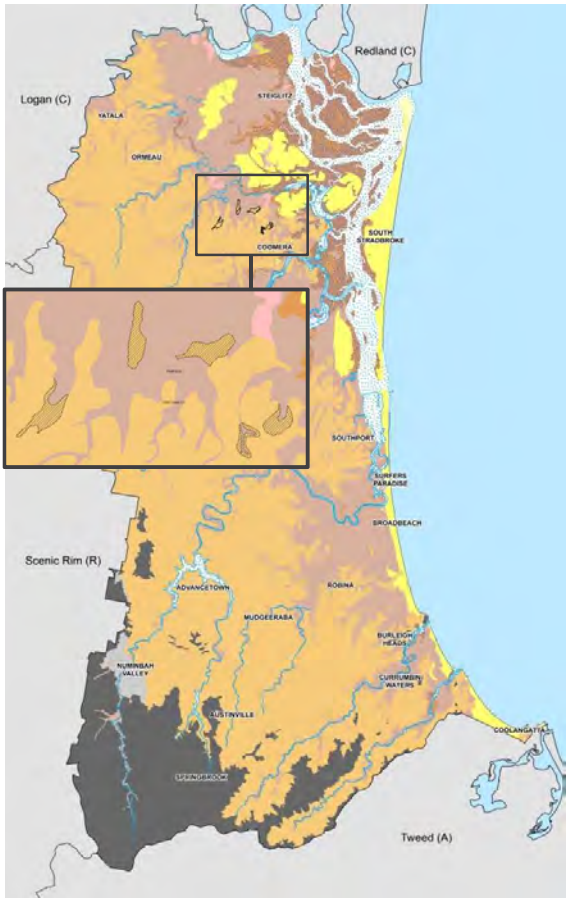
Forest Boronia
Boronia rosmarinifolia
SHRUB

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 on metasediments is a naturally restricted vegetation type within the Gold Coast City area, and occurs in small patches in the Pimpama/Norwell areas. These areas are on sandy loam soils derived from coastal sediments, and occur on low rises in coastal areas. This vegetation type now occurs only in the Kerkin Road/ Gainsborough Greens area within Gold Coast City.

Historic distribution of Vegetation Type 3d



LEGEND

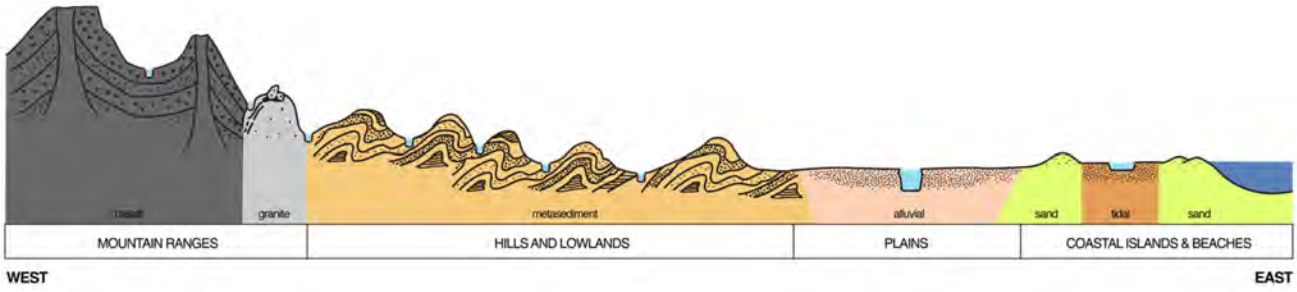
Vegetation Type 3d | Ocean | Major Waterways

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 (not subject to tidal inundation)	Sand	
	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**

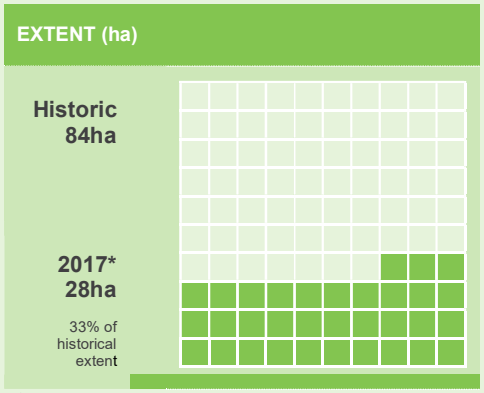
The most common underlying geology on the Gold Coast is metasediment rocks. Metasediment rocks are a type of metamorphic rock (rock transformed by heat and pressure). Originally these rocks were sedimentary rocks which were formed on the ocean floor through the deposition and solidification of sediment. 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

One of the least common types of eucalypt vegetation types both historically and currently. The current extent* of this vegetation type on the Gold Coast is 28 hectares.

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

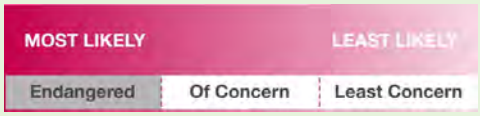


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth

Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.11.27) as being 'Endangered'.

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 on metasediments is now represented only at Pimpama, and is threatened by any future land clearing and development in this area. The area is also under threat from inappropriate fire (too frequent, low intensity fires). Not particularly prone to weed infestation, weeds develop mostly on the margins of fragmented areas.

Common threats to all vegetation types

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 types are 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.

CITY OF GOLDCOAST.