EUCALYPT

VEGETATION TYPE 7

Regional Ecosystem: 12.11.18

Gum-topped Box (*Eucalyptus moluccana*)
Woodland on Metasediments

COMMUNITY STRUCTURE

Vegetation type (VT) 7 is typically a tall woodland with an open canopy (30-60% cover) shading underlying plants. The canopy layer is characteristically dominated by mature Gum-topped Box (*Eucalyptus moluccana*) trees, often with *E. siderophloia/ E. crebra, Corymbia* intermedia and *C. citriodora* also present.

Source: Searle, 2019 (derived from Ryan et al, 2019; GC132; GC143)

The sub-canopy is sparse and mainly smaller canopy trees, together with other medium-sized trees (*Corymbia tessellaris*, *Lophostemon confertus*, *Alphitonia excelsa*). The shrub layer is also sparse and comprised mainly of wattles (*Acacia leiocalyx*, *A. disparrima*) and Red Ash (*Alphitonia excelsa*). The ground cover is dominated by grasses.

Characteristic plant species

Approximately **55 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

Gum-topped Box

Eucalyptus moluccana

Grey Ironbark

Eucalyptus siderophloia

Spotted Gum

Corymbia citriodora subsp. variegata

Narrow-leaved Ironbark

Eucalyptus crebra

Pink Bloodwood

Corymbia intermedia

SUB-CANOPY

Tree layer below canopy

Photo needed **Broad-leaved White Mahogany** *Eucalyptus carnea*	 **Smooth-barked Apple** *Angophora leiocarpa*	 **Pink Bloodwood** *Corymbia intermedia*	 **Red Ash/Soap Bush** *Alphitonia excelsa*
 **Swamp Box** *Lophostemon suaveolens*	 **Hickory Wattle** *Acacia disparrima subsp. disparrima*	 **Moreton Bay Ash** *Corymbia tessellaris*	 **Brush Box** *Lophostemon confertus*

SHRUB LAYER

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

Red Ash/Soap Bush

Alphitonia excelsa

Hickory Wattle

Acacia disparrima subsp. disparrima

Black Wattle

Acacia concurrens

Early Black Wattle

Acacia leiocalyx

Spotted Gum

Corymbia citriodora

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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.

Photo needed

A Nineawn Grass
Enteropogon unispiceus
GRASS (TUSSOCK)

Graceful / Pademelon Grass
Ottochloa gracillima
GRASS (TUSSOCK)

Wiry Panic
Entolasia stricta
GRASS (TUSSOCK)

Pale Mat Rush
Lomandra confertifolia subsp. pallida
GRAMINOID

Blady Grass
Imperata cylindrica
GRASS

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. The following CWS plant species may be present in this vegetation type.

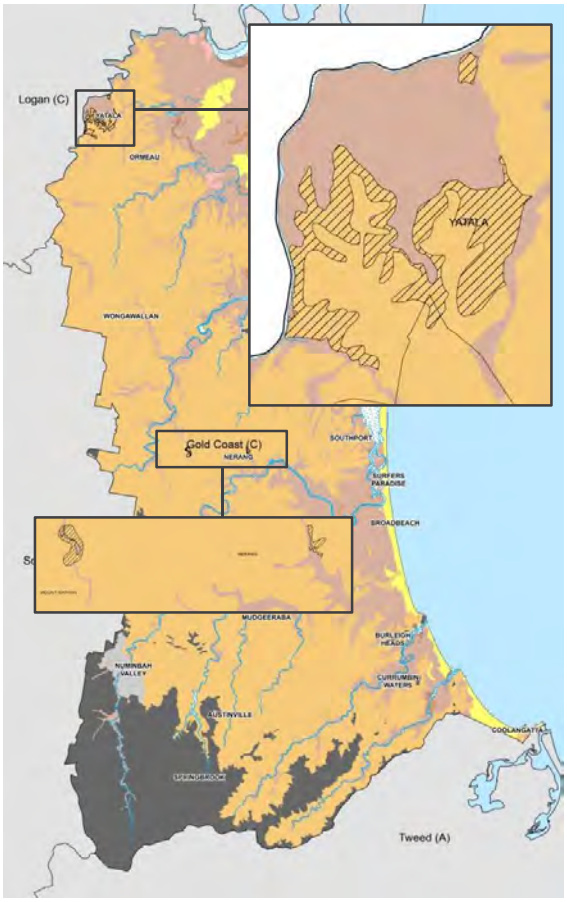
Decorative Paperbark
Melaleuca decora
TREE

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.

Gum-topped Box Woodland on Metasediments is a naturally restricted vegetation type. It occurred in small patches within Gold Coast in the Mt Nathan, Nerang and Yatala areas. These areas are on clay loam soils derived from coastal sediments (sandstone, greywacke etc) on lower foothills and hillslopes. Much of these areas have been cleared for agricultural purposes. This vegetation type also occurs further to the west outside the City area.

Historic distribution of Vegetation Type 7



LEGEND

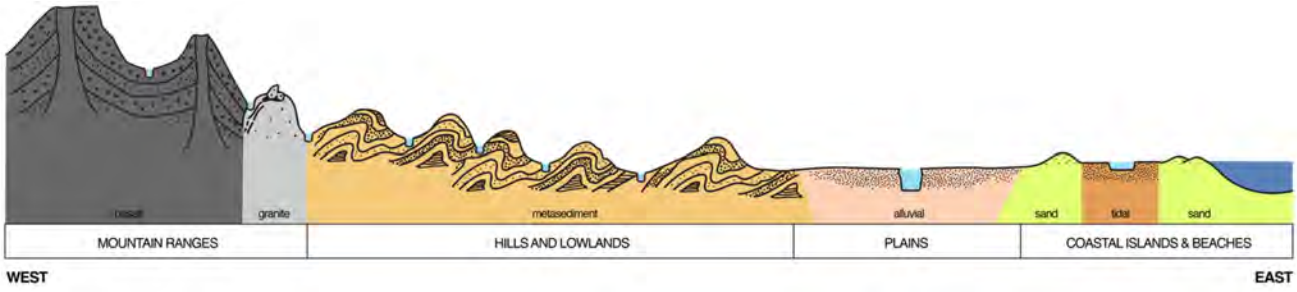
Vegetation Type 7 | Ocean | Major Waterways

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**

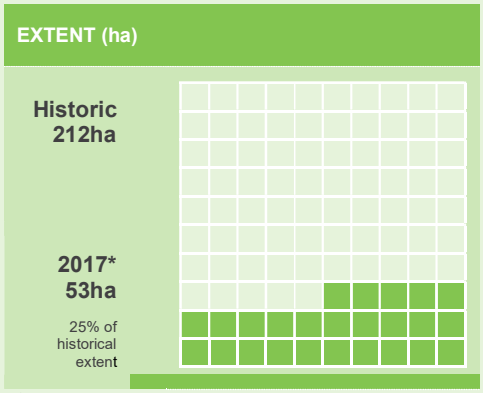
The most common underlying geology on the Gold Coast is metasediment rocks. Metasediment rocks are a type of metamorphic rock (rock transformed by heat and pressure). Originally these rocks were sedimentary rocks which were formed on the ocean floor through the deposition and solidification of sediment.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

The current extent* of VT7 on the Gold Coast is 53 hectares.

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

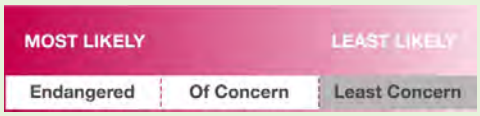


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.11.18) 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

This vegetation type has been subject to previous clearing for agricultural purposes. It still occurs in small patches at Gilston and western Yatala, which are threatened by land clearing for agricultural purposes and for future development. Clearing, fragmentation and gradual degradation are ongoing threats to the remaining patches of this vegetation type within Gold Coast City. Fire and weeds are additional threats and need to be managed carefully and consistently, especially in most areas where the understorey is cleared or disturbed. .

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.

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