

# Wet Eucalypt

## VEGETATION TYPE 38a

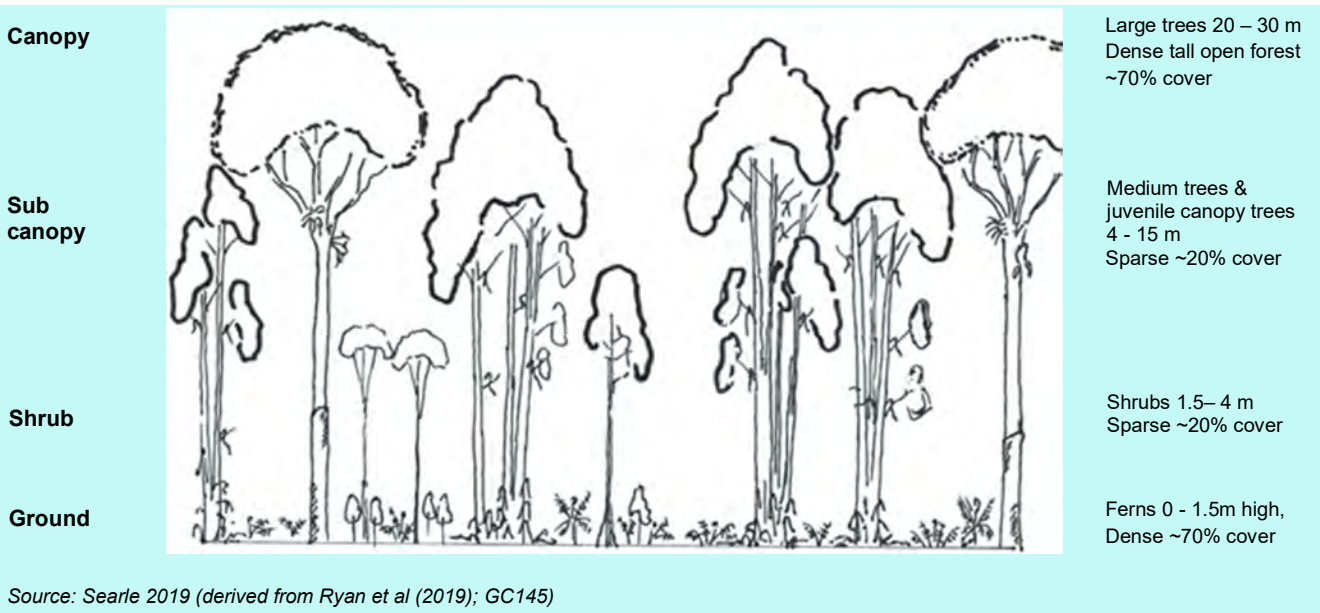
Regional Ecosystem: 12.8.2

Blue Mountains Ash +/- New England Blackbutt (*Eucalyptus oreades* +/- *E. campanulata*) Open Forest on Cainozoic Igneous Rocks



## COMMUNITY STRUCTURE

Vegetation type (VT) 38a has a tall open forest canopy (approximately 70% cover), typically 20-30m in height, with Blue Mountains Ash (*Eucalyptus oreades*) as the dominant and distinctive canopy tree, characterised by its long vertical ribbons of shed bark. New England Blackbutt (*Eucalyptus campanulata*) is also present in the canopy, whilst Blueberry Ash (*Elaeocarpus reticulatus*), (*Acacia obtusifolia*) as one of the dominant trees, together with Turpentine (*Syncarpia glomulifera*) and other eucalypts (particularly *E. acmenoides*, *E. microcorys*). Mountain Wattle (*Acacia orites*), Forest She-oak (*Allocasuarina torulosa*) and Tree Daviesia (*Daviesia arborea*) are often conspicuous in a sparse sub-canopy layer, and also as shrubs together with a diversity of other smaller trees.



The shrub layer is sparse to mid-dense depending on time period since last fire, and often includes *Schizomeria ovata*, *Elaeocarpus reticulatus*, *Acacia melanoxylon*, *Austrobuxus swainii*, *Cryptocarya erythroxylon*, *Cyathea australis*, *Dodonaea spp.* and *Polyscias sambucifolia*. The ground cover is diverse and is often dominated by ferns (particularly *Calochlaena dubia*, *Dicranopteris linearis* and *Pteridium esculentum*). Vines are common, including *Smilax australis* and *Cissus hypoglauca*.

## Characteristic plant species

Approximately **38 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\*



Indicates species is a Glossy Black-Cockatoo feed tree species



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



**Blue Mountains Ash**  
*Eucalyptus oreades*



**New England Blackbutt**  
*Eucalyptus campanulata*

### SUB-CANOPY

Tree layer below canopy



**Blueberry Ash**  
*Elaeocarpus reticulatus*



**Blunt Leaf Wattle**  
*Acacia obtusifolia*



**Bolly Gum**  
*Litsea reticulata*



**Lemon-scented Tea-tree**  
*Leptospermum petersonii*





**Scentless Rosewood**  
*Synoum glandulosum*



**White Bolly Gum**  
*Neolitsea dealbata*



**Waddy Wood/ Tree Heath**  
*Trochocarpa laurina*



**Corkwood**  
*Duboisia myoporoides*

## SHRUB LAYER

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



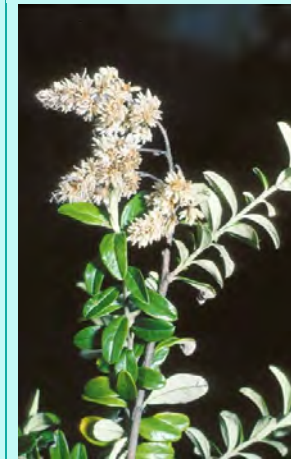
**Blueberry Ash**  
*Elaeocarpus reticulatus*



**Logania**  
*Logania albiflora*



**Black Tree Fern**  
*Cyathea australis*



**Cassinia**  
*Cassinia subtropica*

# SHRUB LAYER

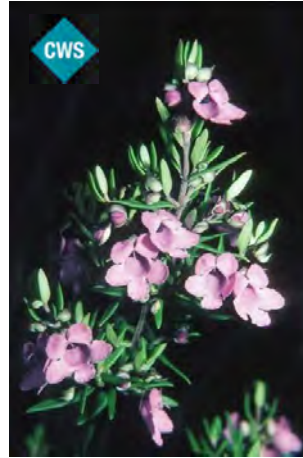
Middle layer of vegetation usually made up of small trees and woody shrubs



**Hairy-leaved Doughwood**  
*Melicope micrococca*



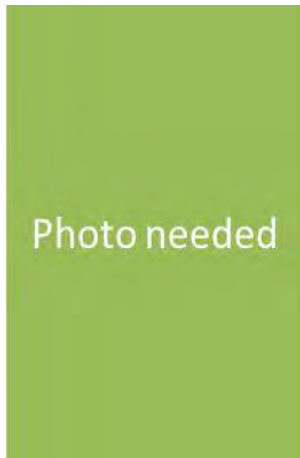
**Elderberry Panax**  
*Polyscias sambucifolia*



**Spiked Mintbush**  
*Prostanthera phyllicifolia*



**Native Daphne**  
*Pittosporum undulatum*



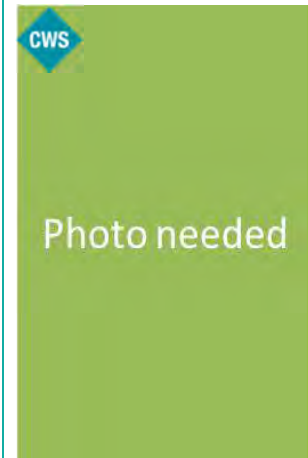
**Bleeding Heart**  
*Homalanthus populifolius*



**Crinkle Bush**  
*Lomatia silicifolia*



**A Geebung**  
*Persoonia media*



**Hairpin Banksia**  
*Banksia spinulosa v cunninghamii*



## GROUND LAYER

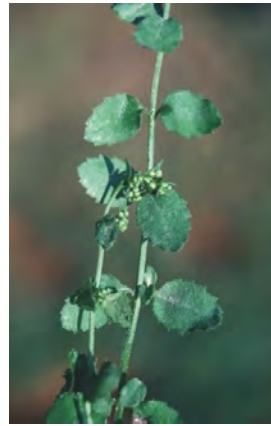
Lowest layer of vegetation. Plant types can include grasses; graminoids (non-woody plants with a grass-like morphology); ferns; and forbs (non-woody, broad-leaved, flowering plants).



**Old World Forked Fern**  
*Dicranopteris linearis*  
FERN



**Common Ground Fern**  
*Calochlaena dubia*  
FERN



**Raspwort**  
*Gonocarpus teucroides*  
FORB



**Trailing Guinea Flower**  
*Hibbertia dentata*  
VINE



**Gristle Fern**  
*Blechnum cartilagineum*  
FERN



**Black-fruit Saw-sedge**  
*Gahnia melanocarpa*  
GRAMINOID (SEDFE)



**Blueberry Flax-lily**  
*Dianella caerulea*  
FORB



**Wiry Panic**  
*Entolasia stricta*  
GRASS



**Black Bog-rush**  
*Schoenus melanostachyus*  
GRAMINOID (SEDFE)



**Tall Sword-sedge**  
*Lepidosperma elatius*  
GRAMINOID (SEDFE)

## VINES AND CLIMBERS

Plant species which grow from the ground but use trees or other features for support and often extend upwards into the canopy.



**Long-leaved Water Vine**  
*Cissus sterculiifolia*  
VINE



**Petermannia**  
*Petermannia cirrosa*  
VINE



**Giant Water Vine**  
*Cissus hypoglauca*  
VINE



**Sweet Sarsaparilla**  
*Smilax glycyphylla*  
VINE

## 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.



**Blunt Leaf Wattle**  
*Acacia obtusifolia*  
SHRUB



**Tall Sword-sedge**  
*Lepidosperma elatius*  
GRAMINOID (SEDGE)



**Nightcap Daisy Bush**  
*Olearia heterocarpa*  
SHRUB

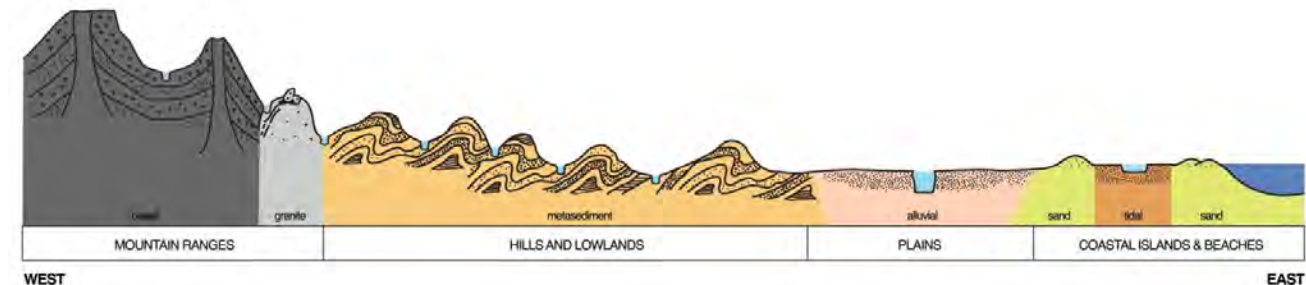
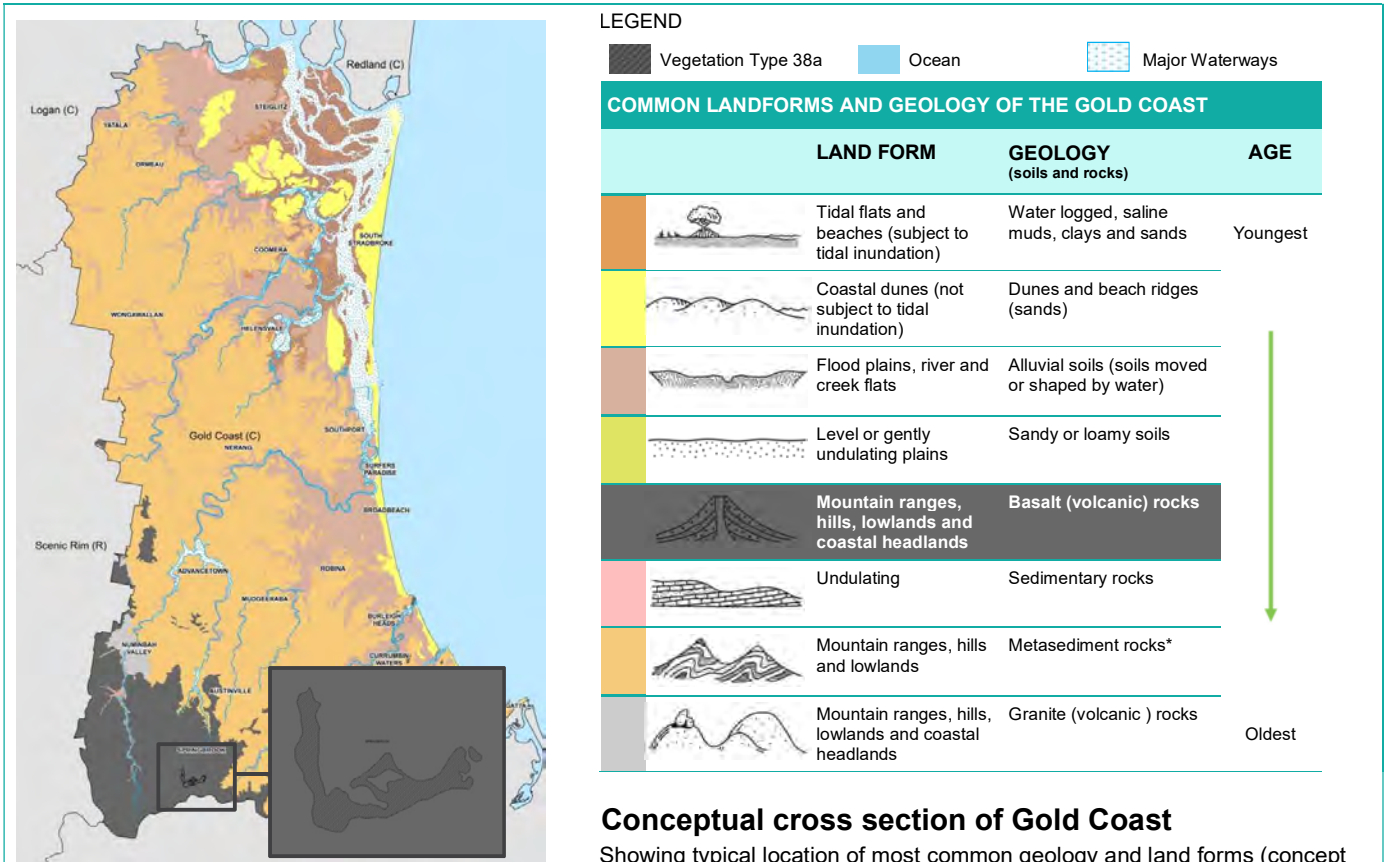


## OCCURRENCE

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.

This vegetation type is the most common tall open forest on the Springbrook and Lamington plateaus within the Gold Coast. It occupies central moderate to high altitude (300m+ above sea level) areas of these plateaus on basalt- and rhyolite-derived sandy to loamy soils. It adjoins rainforest (VT29b, 29c, 29d) on richer basalt-derived soil, and VT41 (Flooded Gum/Sydney Blue Gum tall open forest on Cainozoic Igneous Rocks) in more sheltered gullies. It also transitions into VT1d (Broad-leaved White Mahogany/Queensland Stringybark/Tallowwood) on more exposed areas and drier rhyolitic soils. Mapped areas are restricted to elevated areas at Springbrook.

## Historic distribution of Vegetation Type 38a



### \* 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 metamorphism, 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

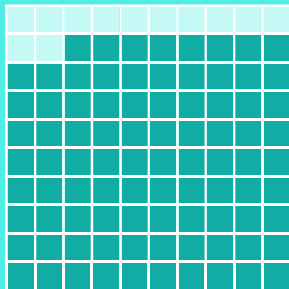
Historically, one of the least common types of vegetation on the Gold Coast. 88% of its historical extent remains. The 2015 extent\* of this vegetation type on the Gold Coast was 70 hectares.

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

#### EXTENT (ha)

Historic  
79ha

2017\*  
70 ha  
88% of  
historical  
extent

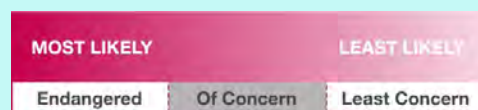


\* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

### Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.8.2) as being 'Of 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 occurs on moderately fertile soils in high rainfall areas, and is subsequently subject to some level of weed invasion, particularly Lantana, and to a lesser extent Privet and other weeds that grow well in temperate environments. The vegetation is common on flatter areas of the Springbrook plateau and is therefore subject to clearing and disturbance from fire. Weed and fire management are key to the healthy management of this vegetation type.

### 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.