

WET EUCALYPT

VEGETATION TYPE 2

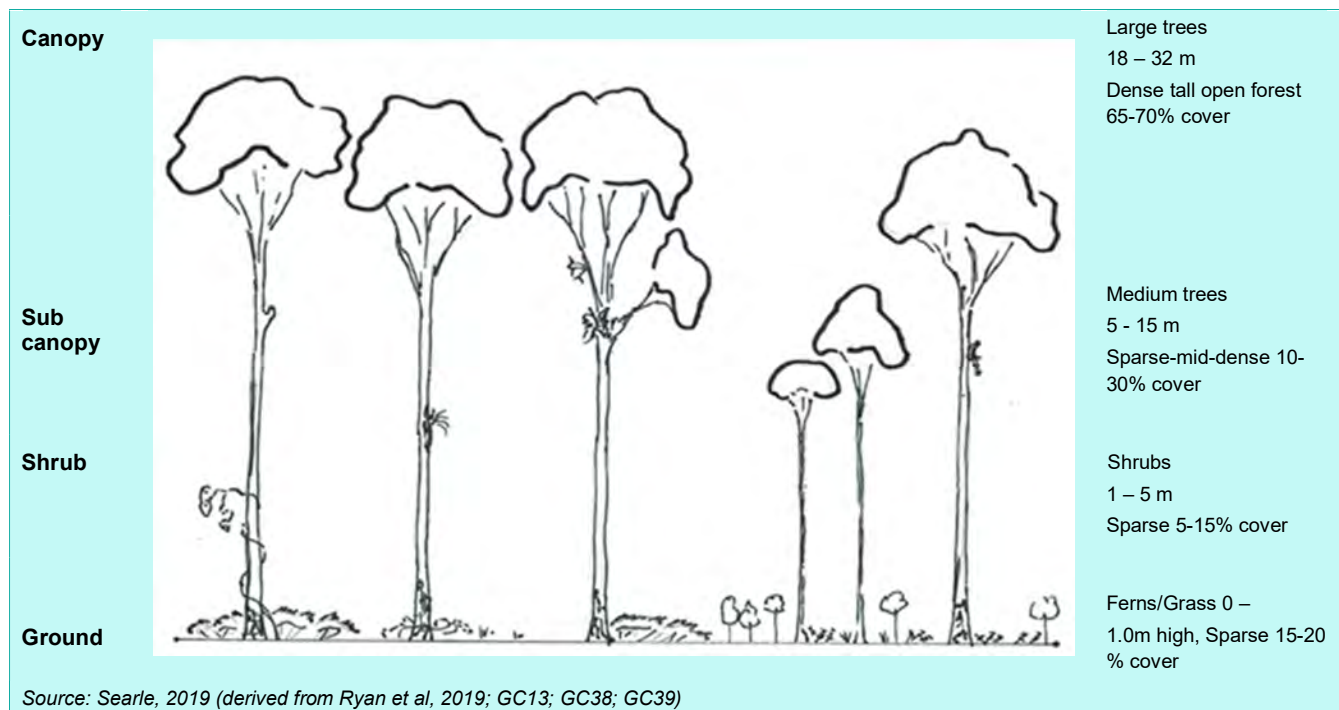
Regional Ecosystem: 12.11.3a

Brush Box (*Lophostemon confertus*) Open Forest with Rainforest Understorey on Metasediments



COMMUNITY STRUCTURE

This Brush Box vegetation type is typically a tall open forest on sheltered slopes and at the heads of gullies in high rainfall catchments throughout Gold Coast City. The vegetation is characterised by a tall canopy layer of (often densely-packed) Brush Box (*Lophostemon confertus*) to between 18m and 32m in height. The sub-canopy is also dominated by Brush Box, while other eucalypts (particularly *Eucalyptus siderophloia* (Grey Ironbark), *E. microcorys* (Tallowwood) and *E. propinqua* (Small-fruited Grey Gum) are also present in lower numbers in both tree layers.



The shrub layer is often sparse, usually with Forest She-Oak (*Allocasuarina torulosa*) and wattle (*Acacia disparrima*) the most common species, although a rainforest understorey may be present in some areas. Epiphytes are common on trees, whilst the ground cover is dominated by ferns (*Blechnum cartilagineum*, *Doodia aspera*) and grasses (*Themeda triandra*, *Digitaria parviflora*) depending on fire history.

Characteristic plant species

Approximately **127 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



Brush Box
Lophostemon confertus



Grey Ironbark
Eucalyptus siderophloia



Tallowwood
Eucalyptus microcorys



Small-fruited Grey Gum
Eucalyptus propinqua

SUB-CANOPY

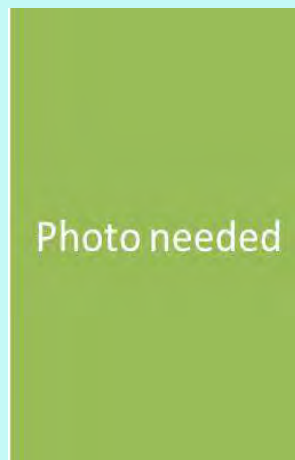
Tree layer below canopy



Brush Box
Lophostemon confertus



Forest She-Oak
Allocasuarina torulosa



Hickory Wattle *Acacia*
disparima subsp. *disparima*

SUB-CANOPY

Tree layer below canopy



Hairy Walnut
Endiandra pubens



White Bolly Gum
Neolitsea dealbata



Wild Quince
Guioa semiglauca



Wheel of Fire
Stenocarpus sinuatus

SHRUB LAYER

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



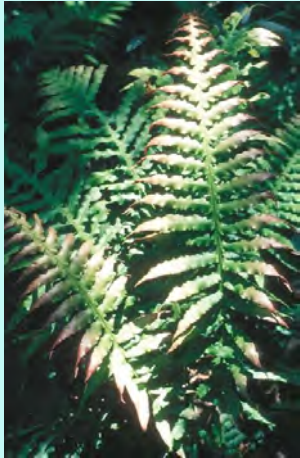
Red Ash/Soap Bush
Alphitonia excelsa



Common Hop Bush
Dodonaea triquetra

GROUND LAYER AND VINES

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) and vines which may extend upwards into the canopy.



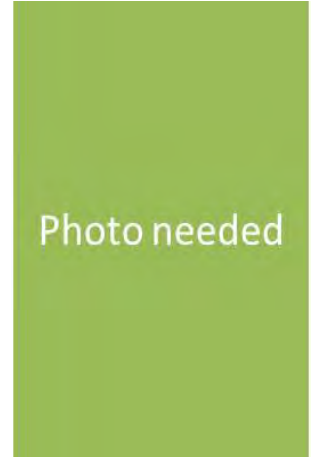
Gristle Fern
Blechnum cartilagineum
FERN



Prickly Rasp Fern
Doodia aspera
FERN



Kangaroo Grass
Themeda triandra
GRASS (TUSSOCK)



Small-flowered Fingergrass
Digitaria parviflora
GRASS (TUSSOCK)



Small Water Fern
Doodia caudata
FERN



Barbed-wire Vine
Smilax australis
VINE

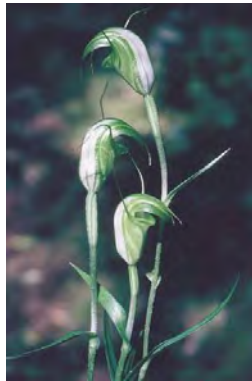


Scrambling Lily
Geitonoplesium cymosum
VINE

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 Tongue Greenhood
Pterostylis obtusa
FORB



Palm Lily
Cordyline congesta
PALM



Long-leaved Tuckerroo
Cupaniopsis newmanii
SHRUB



Shining Burrawang
Lepidozamia peroffskyana
CYCAD



Bill McDonald's Laurel
Cryptocarya macdonaldii
TREE



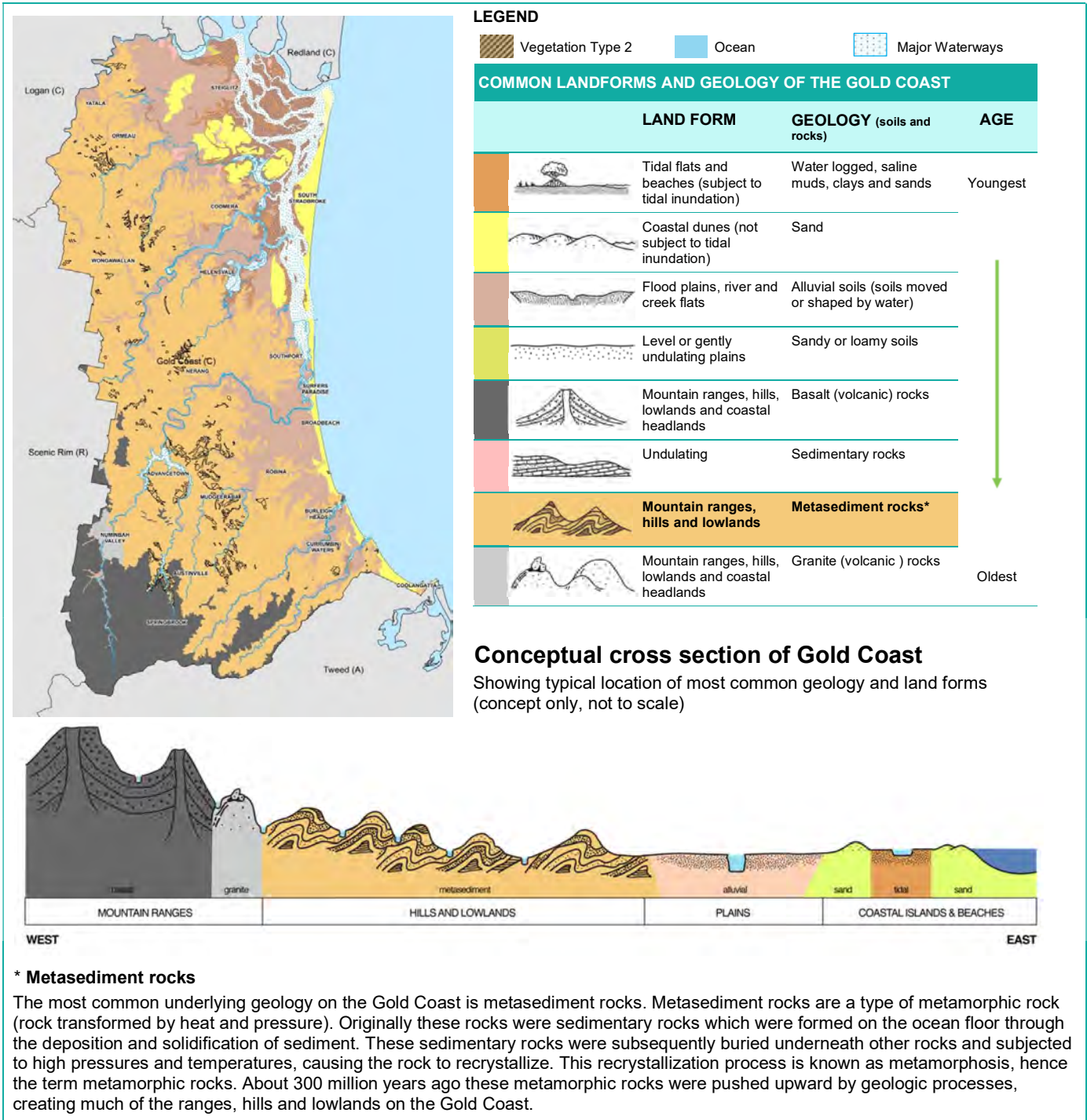
Small Supplejack
Ripogonum fawcettianum
VINE

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 occurs on moist, sheltered foothills and low slopes of escarpment areas throughout the hinterland of Gold Coast City, occurring on the rich red to brown soils of the Springbrook plateau and associated ridges to the east. It is often adjoining rainforest, and grades into VT1b (Grey Gum/Tallowwood/Grey Ironbark Open Forest vegetation) or other tall moist eucalypt vegetation types in areas subject to more regular exposure to fire or periodic drying out. It occurs on a variety of sediment-derived soils (mudstone etc) in sheltered situations with high moisture and dark, humic organic content. Common localities include Wongawallan, Eagle Heights, Maudsland, Gilston, Mudgeeraba, Bonogin and Tallebudgera and Currumbin Valleys.

Historic distribution of Vegetation Type 2



2017 EXTENT AND CONSERVATION STATUS

Gold Coast

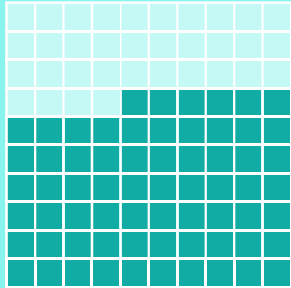
The current extent* of this vegetation type on the Gold Coast is 1,698 hectares.

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

EXTENT (ha)

Historic
2,570ha

2017*
1,488ha
66% of
historical
extent

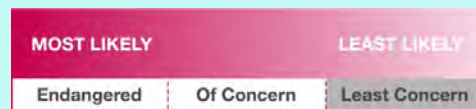


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth

Queensland

The conservation status of vegetation in Queensland is specified under the Vegetation Management Act 1999, which lists this regional ecosystem (RE 12.11.3a) 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

Brush Box Tall Open Forest reaches its best development in moist, sheltered gullies and lower slopes of escarpment areas gullies with higher rainfall and moisture, and is susceptible to infestation by Lantana and exotic scrambling vines (notably *Pueraria lobata*, *Anredera cordifolia* and *Macfadyena unguis-cati*). This vegetation community transitions towards rainforest in the absence of fire.

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.