Wet Eucalypt

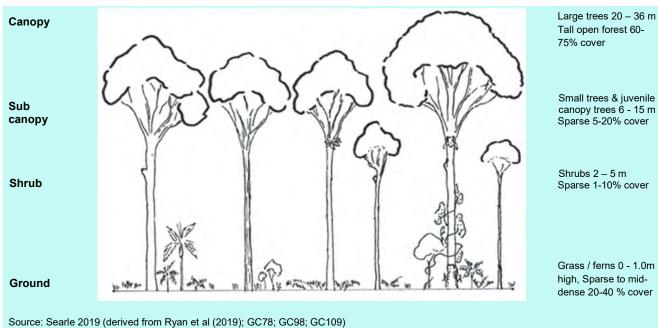
VEGETATION TYPE 41

Regional Ecosystem: 12.8.8 Flooded Gum/Sydney Blue Gum (Eucalyptus saligna/E. grandis) Tall Open Forest on Cainozoic igneous rocks



COMMUNITY STRUCTURE

Vegetation type (VT) 41 is typically a tall open forest. The canopy layer is typically 20-36m high providing 60-75% cover (shading underlying plants). Flooded Gum and/or Sydney Blue Gum (Eucalyptus grandis, E. saligna) are conspicuous and characterise the canopy layer, while White Mahogany (E. acmenoides), Tallowwood (E. microcorys) and Pink Bloodwood (Corymbia intermedia) are also typically present.



dense 20-40 % cover

The sub-canopy and shrub layers are typically sparse, with Brush Box (Lophostemon confertus) and maturing eucalypts, together with Forest She-oak (Allocasuarina torulosa) and predominately rainforest trees in the sparse but diverse shrub layer (Claoxylon australe, Cryptocarya microneura, Synoum glandulosum, Callicoma serratifolia and Cyathea australis often present). The groundcover layer is dominated by ferns and grasses (particularly Pteridium esculentum, Blechnum cartilagineum, Ottochloa gracillima, Poa cheelii, Imperata cylindrica), while Lepidozamia peroffskyana and Alpinia caerulea are also characteristic. Vines are also common, including Smilax australis, Dioscorea transversa and Clematicissus opaca.



. . .

Characteristic plant species

Approximately **129 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



Sydney Blue Gum Eucalyptus saligna



Flooded Gum Eucalyptus grandis



Pink Bloodwood Corymbia intermedia



White Mahogany Eucalyptus acmenoides



Turpentine Syncarpia glomulifera



Small-fruited Grey Gum Eucalyptus propinqua



Tallowwood Eucalyptus microcorys



Grey Ironbark Eucalyptus siderophloia



SUB-CANOPY

Tree layer below canopy



Forest She-Oak Allocasuarina torulosa



Brush Box Lophostemon confertus





White Mahogany Eucalyptus acmenoides

SHRUB LAYER

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



Brush Box Lophostemon confertus



Murrogun Cryptocarya microneura



Brittlewood Claoxylon australe



Scentless Rosewood Synoum glandulosum



Callicoma Callicoma serratifolia



Rough Tree Fern Cyathea australis



Shining Burrawang Lepidozamia peroffskyana



Crab Apple Schizomeria ovata



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.



Common Bracken Pteridium esculentum FERN



Graceful / Pademelon Grass Ottochloa gracillima GRASS Photo needed

Blue Grass Poa cheelii GRASS



Blady Grass Imperata cylindrica GRASS



Gristle Fern Blechnum cartilagineum FERN



Native Ginger Alpinia caerulea FORB



Barbed-wire Vine Smilax australis VINE



Forest Grape Clematicissus opaca VINE



Native Yam Dioscorea transversa VINE

Photo needed

Prickly Shield Fern Arachniodes aristata FERN



Creeping Beard Grass Oplismenus hirtellus subsp. imbecillis GRASS



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



Veiny Lace Flower Archidendron muellerianum TREE



Mountain Wattle Acacia orites SHRUB

A Water Fern Blechnum camfieldii FERN

Photo needed



Palm Lily Cordyline congesta SHRUB



Thick-leaved Laurel Cryptocarya meisneriana SHRUB



Rose Apple Cryptocarya rigida TREE



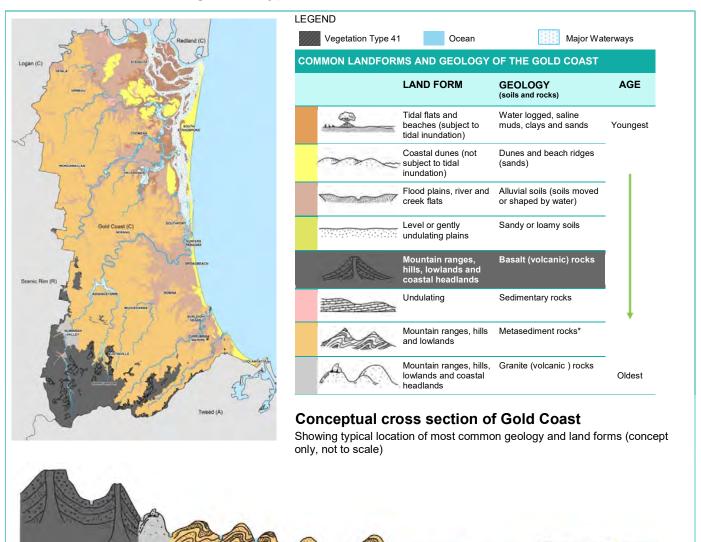
Tall Sword-sedge Lepidosperma elatius GRAMINOID (SEDGE)



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 restricted to southern part of the Gold Coast, occurring on the rich, red to brown soils of the Springbrook plateau and associated ridges to the east. It occurs in moist fertile areas exposed to high rainfall, and in moist sheltered gullies where it forms a mosaic with VT38 (New England Blackbutt tall open forest on Cainozoic igneous rocks), which is more common on more exposed areas and drier rhyolitic soils (from fine-grained, igneous rock rich in silica). Common localities include Springbrook, Numinbah, Advancetown, Bonogin and Upper Tallebudgera and Currumbin valleys.



Historic distribution of Vegetation Type 41

WEST

Metasediment rocks

MOUNTAIN RANGES

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.

PLAINS

HILLS AND LOWLANDS



EAST

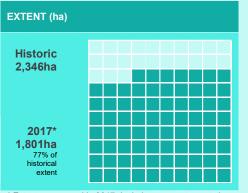
COASTAL ISLANDS & BEACHES

2017 EXTENT AND CONSERVATION STATUS

Gold Coast

Historically, one of the most common types of wet eucalpyt on the Gold Coast. 77% of its historical extent remains. The 2017 extent* of this vegetation type on the Gold Coast was 1,602 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 12.8.8) as being 'Of Concern'.

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

| MOST LIKELY | | LEAST LIKELY |
|-------------|------------|---------------|
| Endangered | Of Concern | Least Concern |

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 is largely restricted to more fertile, high-altitude ridges, plateaus and 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 may transition towards rainforest in the absence of fire, and relies on appropriate fire management (low frequency, high intensity fires). 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.

