

PROTECTED COASTAL

woodlands



VEGETATION TYPE 39

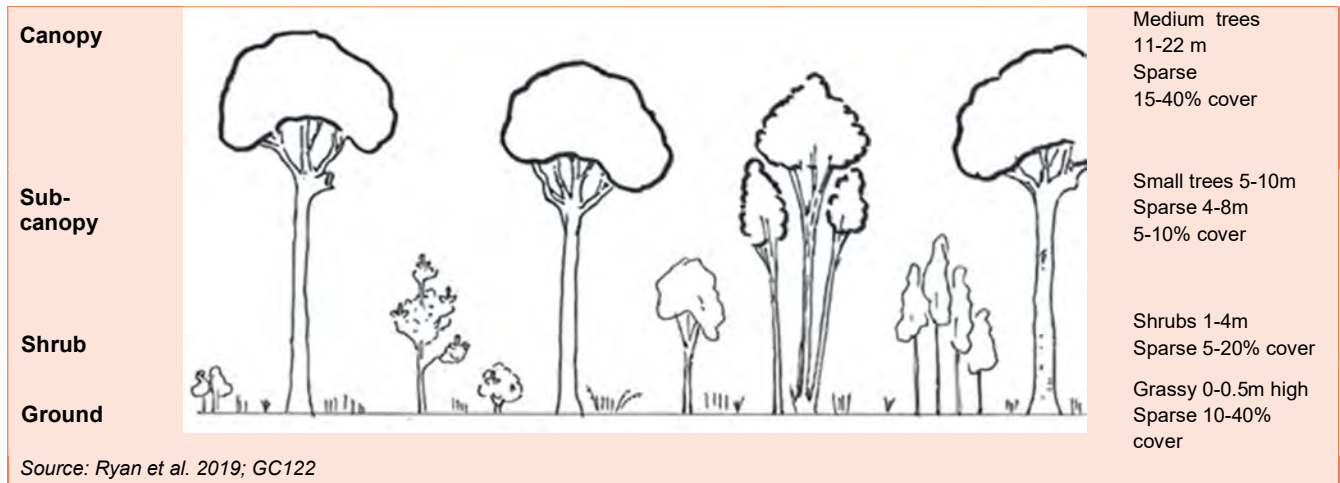
Regional Ecosystem: 12.2.5

Pink Bloodwood +/- Brush Box/Beach Cypress (*Corymbia intermedia* +/- *Lophostemon confertus*/*Callitris columellaris*)
Woodland on Coastal Sand

COMMUNITY STRUCTURE

Pink Bloodwood +/- Brush Box or Beach Cypress woodland on coastal sand deposits forms an open woodland providing between 15% and 40% canopy cover, or shading to understorey plants.

Pink Bloodwood is almost always the dominant canopy tree from 11m to 22m in height, and typically occurs with or without Brush Box (*Lophostemon confertus*) or Beach Cypress (*Callitris columellaris*) in the canopy layer.



The sub-canopy and shrub layers are sparse, and notably include Banksias (*Banksia integrifolia* and *B. serrata*), Black She-oak (*Allocasuarina littoralis*) and wattle (*Acacia concurrens*), while the ground cover is sparse to mid dense and comprised mainly of grasses (*Cymbopogon refractus*, *Themeda triandra*, *Imperata cylindrica* and *Eragrostis spartinooides* are typical).

Characteristic plant species

Approximately **50** native plants species have been recorded for this vegetation type. Characteristic plant species 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.



Pink Bloodwood
Corymbia intermedia



White Cypress Pine
Callitris columellaris



Brush Box
Lophostemon confertus



Cabbage Tree Palm
Livistona australis

SUB-CANOPY

Tree layer below canopy.



Coastal Banksia
Banksia integrifolia



Black She-oak
Allocasuarina littoralis

SUB-CANOPY

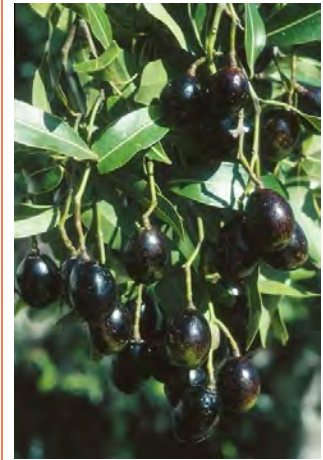
Tree layer below canopy.



Pink Bloodwood
Corymbia intermedia



White Cypress Pine
Callitris columellaris



Corkwood
Endiandra sieberi

SHRUB LAYER

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



Tall Saw-sedge
Gahnia clarkei



Red Honeysuckle
Banksia serrata



Black Wattle
Acacia concurrens

GROUND LAYER

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.



Barbwire Grass
Cymbopogon refractus
GRASS



Kangaroo Grass
Themeda triandra
GRASS



Long-leaved Mat-rush
Lomandra longifolia
GRAMINOID



Lovegrass
Eragrostis interrupta
GRASS



Blady Grass
Imperata cylindrica
GRASS



Giant Water Vine
Cissus hypoglauca
VINE



Bracken Fern
Pteridium esculentum
FERN

City-wide significant plant species



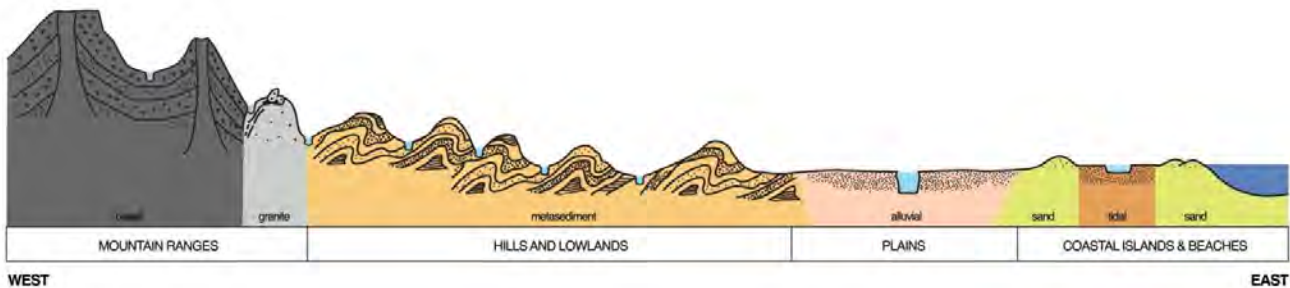
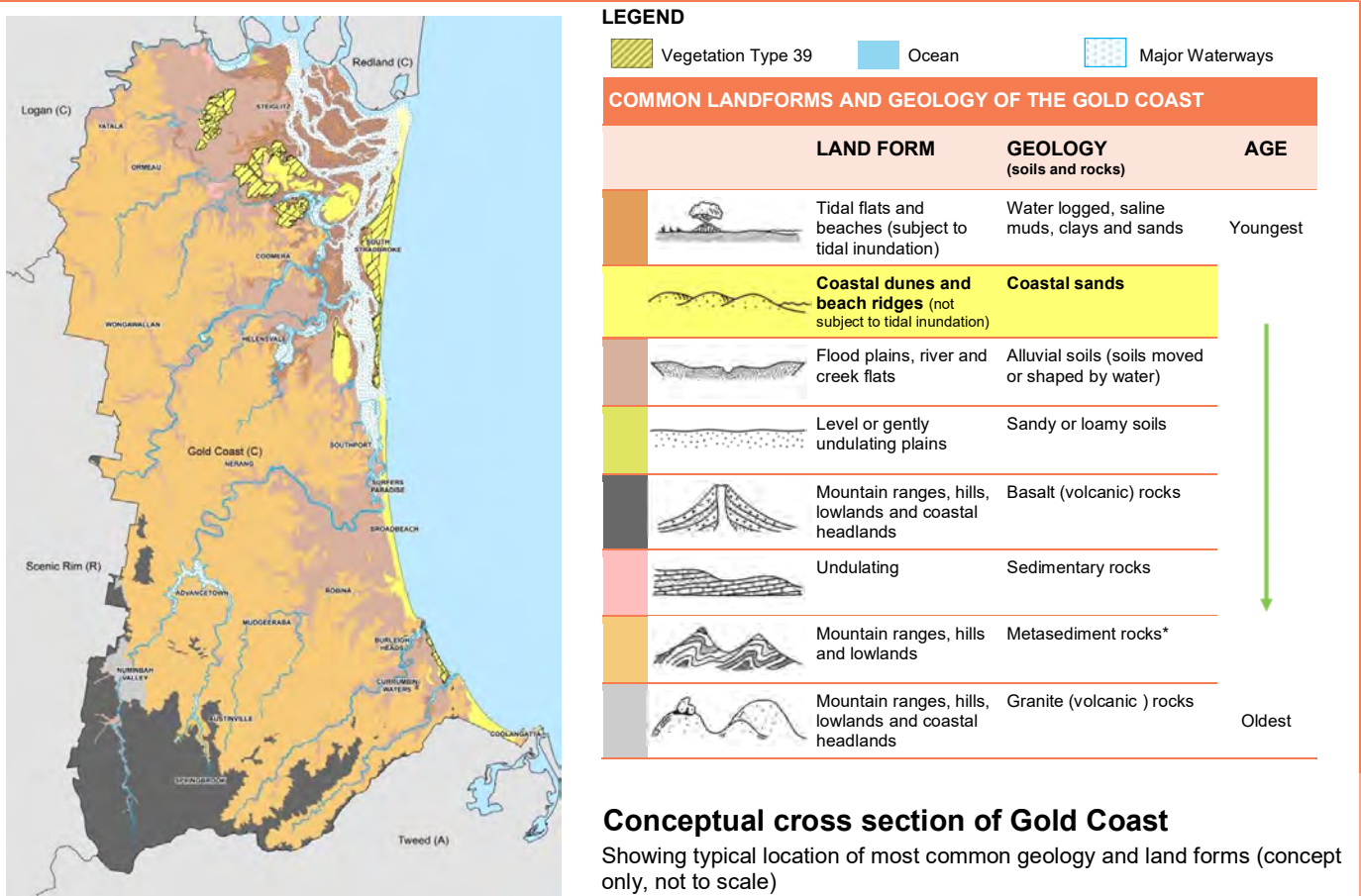
The City of Gold Coast recognises species which are locally significant as City-wide significant (CWS) species. These species are important because they may be threatened, restricted to the Gold Coast, or at the edge of their geographic range. There are no additional CWS plant species recorded in this vegetation type.

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.

Pink Bloodwood +/- Brush Box or Beach Cypress woodland on coastal sand deposits occurs on deep sandy loam soils. These are derived from old sand dunes and are moderately fertile to infertile; although rainfall is generally high and moisture content is retained if the litter layer is sufficiently well developed. This is the vegetation type on South Stradbroke Island, occurring from just behind the coastal foredune and associated vegetation, across most of the island to the western shore with Moreton Bay. Small areas also remain on the Gold Coast mainland at Pimpama, Jacob's Well and Pine Ridge.

Historic distribution of Vegetation Type 39



* 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

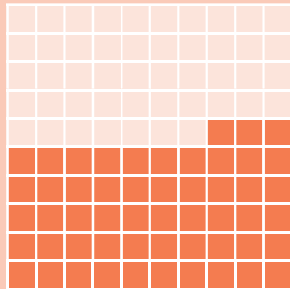
The current extent* of this vegetation type on the Gold Coast is 1,039 hectares.

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

EXTENT (ha)

Historic
2,427ha

2015*
1,039ha
43% of
historical
extent

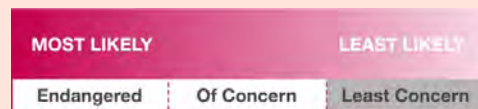


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.2.5) 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 ©

Version 3, November 2020

THREATS

Pink Bloodwood +/- Brush Box or Beach Cypress woodland was previously more widespread across the coastal strip of Gold Coast City, with larger areas at Gilberton, Norwell-Jacob's Well and Pimpama in the north, and at Palm Beach in the South. These areas have been heavily cleared for coastal development, and land clearing remains the greatest threat to this community type. This community typically burns regularly in nature (i.e. at least once every 5 – 15 years), but high frequency fire removes structure and opens the ground layer to desiccation. Weeds, particularly Lantana but also some of the more invasive coastal weeds (such as *Gloriosa superba*, *Bryophyllum* sp., *Baccharis halimifolia* and *Chrysanthemoides monilifera*) occur locally.

About common threats

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 is 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.