

Estuarine Wetland

mangrove



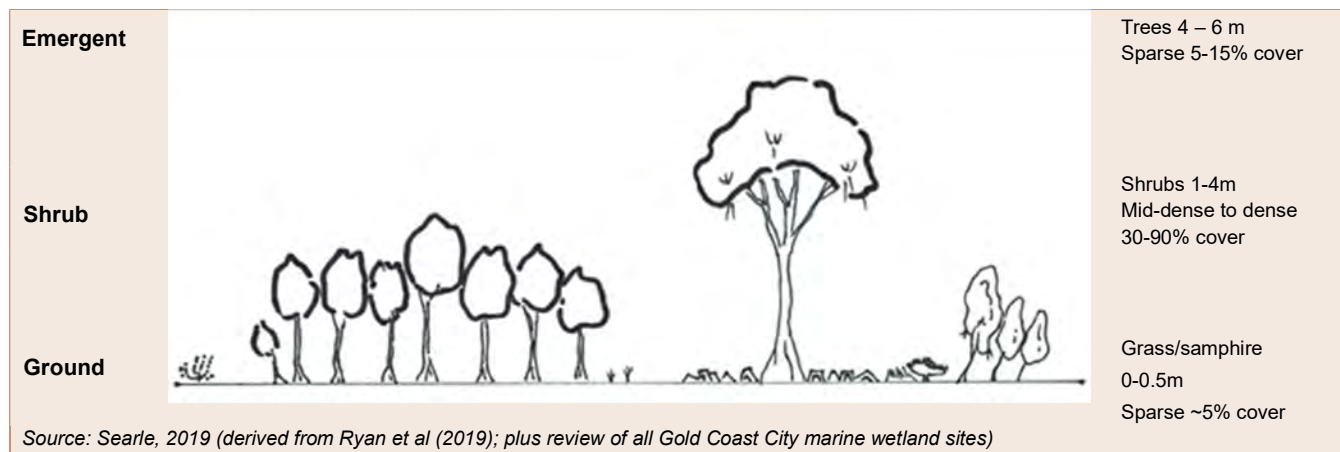
VEGETATION TYPE 18d

Regional Ecosystem: 12.1.3

Yellow Mangrove (*Ceriops australis*) Open Shrubland on Marine Deposits

COMMUNITY STRUCTURE

Vegetation type 18d typically consists of a mid-dense to dense layer of shrubs or small trees between 1m and 4m high, with a cover ranging from 30-90%. Isolated emergent trees occur, mostly Orange Mangrove (*Bruguiera gymnorhiza*) up to 10m high. Yellow Mangrove (*Ceriops australis*) is the dominant and diagnostic species, and isolated patches of marine grasses and/or samphire (*Sporobolus virginicus*, *Suaeda australis*) may also be present.



Characteristic plant species

Approximately **19 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. Plants in blue text are listed as [Wetland Indicator Species](#) in DES Flora Wetland Indicator Species List and are adapted to and dependent on wetlands.



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.

EMERGENT

Isolated trees, visible above all other layers



Orange Mangrove
Bruguiera gymnorhiza



River Mangrove
Aegiceras corniculatum



Stilted Mangrove
Rhizophora stylosa



Grey Mangrove
Avicennia marina



Yellow Mangrove
Ceriops australis



Milky Mangrove
Excoecaria agallocha

SHRUB LAYER

Dominant layer of vegetation made up of small trees and woody shrubs



Yellow Mangrove
Ceriops australis



Grey Saltbush
Atriplex australasica



Berry Saltbush
Einadia hastata



Ruby Saltbush
Enchylaena tomentosa

GROUND LAYER

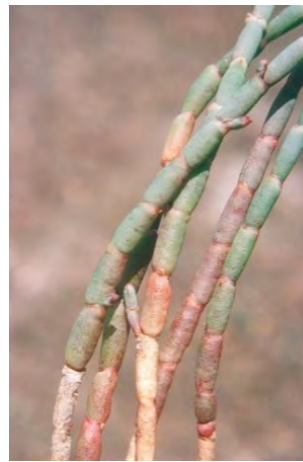
Lowest layer of vegetation. Plant types can include marine grasses, graminoids (non-woody plants with a grass-like morphology), forbs (non-woody, broad-leaved, flowering plants) and samphires (succulent, herbaceous plants that grows in high salinity environments).



Sea Blite
Suaeda australis
SAMPHIRE



Saltwater Couch
Sporobolus virginicus
GRASS (CREEPING)



Beaded Samphire
Sarcocornia quinqueflora
SAMPHIRE



Streaked Arrow Grass
Cynogeton striata
GRAMINOID (SEDGE)

GROUND LAYER

Lowest layer of vegetation. Plant types can include marine grasses, graminoids (non-woody plants with a grass-like morphology), forbs (non-woody, broad-leaved, flowering plants) and samphires (succulent, herbaceous plants that grows in high salinity environments).



Jellybean Sea Blite
Suaeda arbusculoides
SAMPHIRE



Sea Tassel
Ruppia maritima
AQUATIC



Sea Purslane
Sesuvium portulacastrum
FORB



Sea Celery
Apium prostratum
FORB

EPIPHYTES & MISTLETOES

Species that grow on the surface of other plants. Unlike epiphytes, mistletoes are parasitic and derive some or all of their nutritional requirements from the plant on which they grow.



Mangrove Mistletoe
Amyema mackayensis
MISTLETOE



Tiny Bulbophyllum
Bulbophyllum minutissimum
EPIPHYTE

City-wide significant plant species



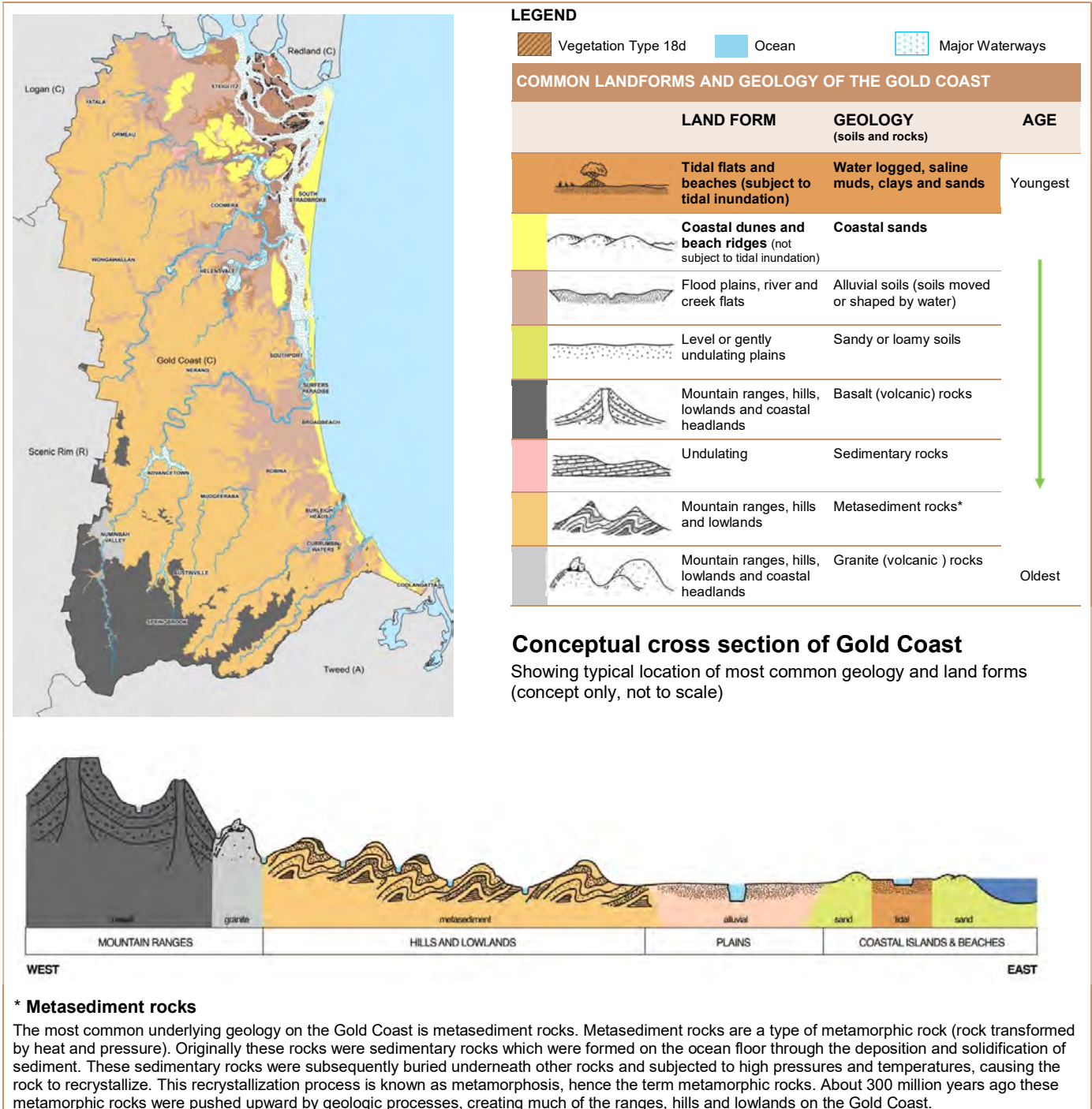
The City of Gold Coast recognises species which are locally significant as City-wide significant (CWS) species. These species are important because they may be threatened, restricted to the Gold Coast, or at the edge of their geographic range. A number of characteristic species are identified above as CWS species. No other CWS plant species have been identified for 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.

Yellow Mangrove open shrubland occurs on more extensive open mudflat areas, often in the shelter of taller mangrove forest, often in areas of localised higher salinity. It is mainly present on more extensive mud flat areas of the Moreton Bay Islands and the exposed mudflats at Cabbage Tree Point. This vegetation type typically occurs in association with other mangrove and marine grassland/herbfield communities (VT18a-c, VT1e/f, and VT22a-d).

Historic distribution of Vegetation Type 18d



2017 EXTENT AND CONSERVATION STATUS

Gold Coast

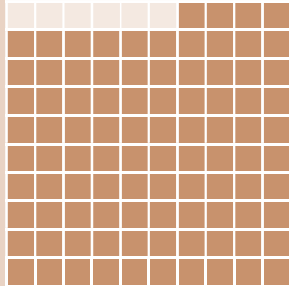
The 2017 extent* of this vegetation type on the Gold Coast was 464 hectares.

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

EXTENT (ha)

Historic
495ha

2017*
464ha
94% of
historical
extent

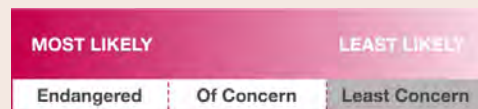


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

Queensland

The conservation status of vegetation in Queensland is specified under *the Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.1.3) 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

Yellow Mangrove open shrubland occurs on tidal creeks and is subject to disturbance from storms and other seasonal weather events. Consequently, sea level rise and potential increased erosion associated with increasing and extreme weather events suggests that Climate Change has the potential to significantly impact on this vegetation community. Weeds are generally a low threat to this community, as it occurs in lower tidal areas..

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 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.