Vegetated Wetland

heath

VEGETATION TYPE 25b

Regional Ecosystem: 12.2.12

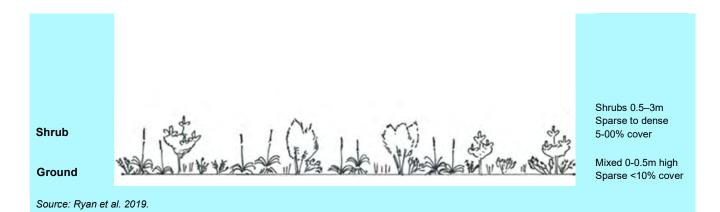
Closed or Wet Heath on Coastal Sand



COMMUNITY STRUCTURE

Closed or wet heath on coastal sand deposits is an open to closed low shrubland up to 3m in height. It varies greatly in cover from 5% to 90% depending on location.

Common and characteristic shrubs include Dwarf Banksia (*Banksia oblongifolia*) and the Tea Trees *Baeckea frutescens* and *Leptospermum liversidgei*.



The ground layer is dominated by Swamp Grasstree (*Xanthorrhoea fulva*) and the rushes *Baloskion pallens and B. tetraphyllus*, with the fern *Blechnum indicum* often characteristically present.

GOLDCOAST.

Characteristic plant species

Approximately **9** native plants species have been recorded for this vegetation type. Characteristic plant species are listed below. Dominant (most numerous) species are shaded. Plants in blue text are listed as <u>Wetland Indicator Species</u> 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.

SHRUB LAYER

Characteristic layer of vegetation made up of small trees and woody shrubs.



Weeping Baeckea
Baeckea frutescens



Olive Tea-Tree

Leptospermum liversidgei



Dwarf BanksiaBanksia oblongifolia

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). Vines are absent.



Swamp Grasstree
Xanthorrhoea fulva
GRASSTREE



Pale Cordrush

Baloskion pallens

GRAMINOID



Tassel Cordrush
Baloskion tetraphyllus
GRAMINOID



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). Vines are absent.



Swamp Water Fern Blechnum indicum FERN



Strangea
Strangea linearis
SUBSHRUB



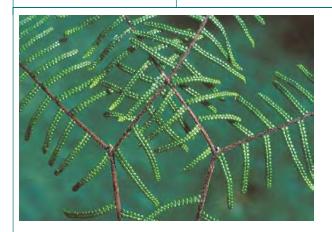
Swamp Triggerplant
Stylidium tenerum
FORB



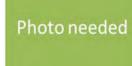
Christmas bells

Blandfordia grandiflora

FORB



Pouched Coral Fern Gleichenia dicarpa FERN



Coastal Coral Fern Gleichenia mendellii FERN



Scrambling Club Moss
Lycopodiella cernua



Curly Sedge
Caustis recurvata
GRAMINOID (SEDGE)



Bog Club Moss

Lycopodiella serpentina
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. In addition to characteristic species identified above as CWS species, the following CWS plant species may also be present in this vegetation type.



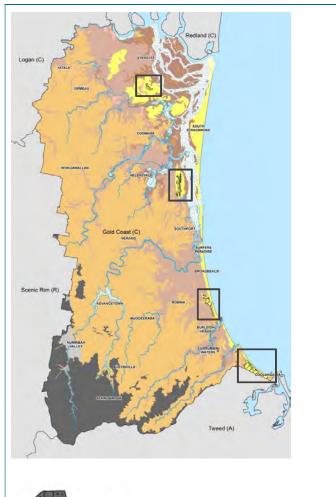
White-flowering Sundew Drosera burmanni
FORB

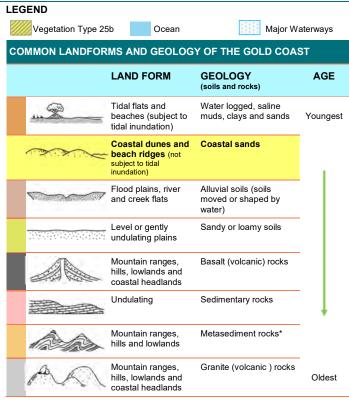
OCCURRENCE

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.

Closed or wet heath on coastal sand deposits typically occurs on older sand dunes near the coast. The water table is usually close to the surface and typically has a high acidic content, influencing the plant species which can tolerate these areas. This vegetation type has been heavily cleared for coastal development, and although never widespread, previously occurred at Pimpama, Southport and Coolangatta. Pine Ridge Conservation Park currently supports the only remaining mapped area of this community, although some small patches may persist at Coolangatta and Pimpama.

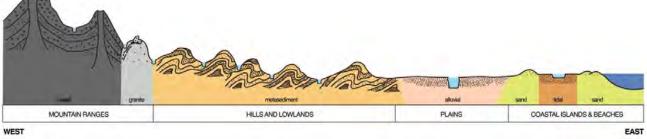
Historic distribution of Vegetation Type 25b





Conceptual cross section of Gold Coast

Showing typical location of most common geology and land forms (concept only, not to scale)



* Metasediment rocks

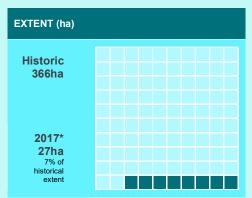
The most common underlying geology on the Gold Coast is metasediment rocks. Metasediment rocks are a type of metamorphic rock (rock transformed by heat and pressure). Originally these rocks were sedimentary rocks which were formed on the ocean floor through the deposition and solidification of sediment. 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 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.

2017 EXTENT AND CONSERVATION STATUS

Gold Coast

The current extent* of this vegetation type on the Gold Coast is 27 hectares. Just 7% of its historical extent.

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 12.2.12) 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

Closed or wet heath on coastal sand deposits remains mainly in Pine Ridge Conservation Park, where it is threatened by the expansion of roads, recreational facilities and inappropriate fire regimes in this highly urbanised area. Other small remaining patches are likely to be threatened by ongoing urban development.

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.

