

Vegetated Wetland

grass, sedge and herb



VEGETATION TYPE 21

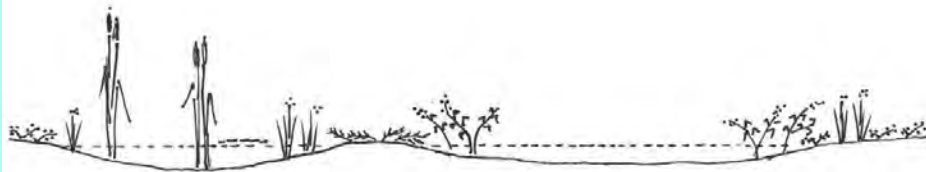
Regional Ecosystem: 12.3.8

Ephemeral Wetlands on Alluvium

COMMUNITY STRUCTURE

Vegetation type (VT) 21 are ephemeral wetlands (wet only seasonally or in wet years) are typically low-lying areas on river floodplains and alluvial terraces with seasonally ponded fresh water, in which a variety of perennial and seasonal aquatic and semi-aquatic plants flourish in wet conditions. Native species vary with location, but often include the rush *Typha domingensis*, the sedge *Cyperus polystachyus* and forbs such as *Eclipta prostrata* and. In addition, the native herbs *Persicaria strigosa* and *P. orientalis* can be dominant and conspicuous, while native grasses such as *Pseudoraphis paradoxa* may be the only species present in drier conditions

Ground



Aquatic forbs and sedges to 2m high

Source: Searle, 2019 (derived from Ryan *et al* (2019); GC130)

Characteristic plant species

Approximately **20 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 [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 (USUALLY ABSENT)

Isolated trees visible above all other layers.



Broad-leaved Paperbark
Melaleuca quinquenervia



Native Water Primrose
Ludwigia octovalvis

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). Vines are absent.



Narrow-leaved Cumbungi
Typha domingensis
GRAMINOID (RUSH)



Bunchy Sedge
Cyperus polystachyu
GRAMINOID (SEDGE)



False Daisy
Eclipta prostrata
FORB



Pale Knotweed
Persicaria lapathifolia
FORB

GROUND LAYER

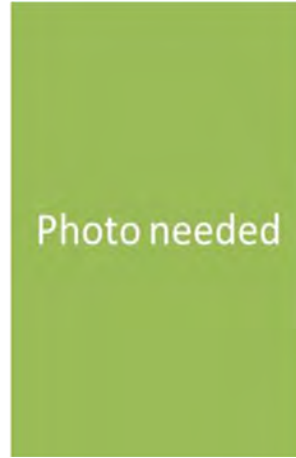
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Princes Feathers
Persicaria orientalis
FORB



Ferny Azolla
Azolla pinnata
AQUATIC (FLOATING)



Slender Mud-grass
Pseudoraphis paradoxa
OTHER GRASS



Woolly Frog's-Mouth
Philydrum lanuginosum
AQUATIC (EMERGENT)



Swamp Ricegrass
Leersia hexandra
OTHER GRASS



Prickly Smartweed
Persicaria strigosa
FORB



Lesser Joyweed
Alternanthera denticulata
FORB



Climbing Guinea-flower
Hibbertia scandens
FORB

City-wide significant plant species



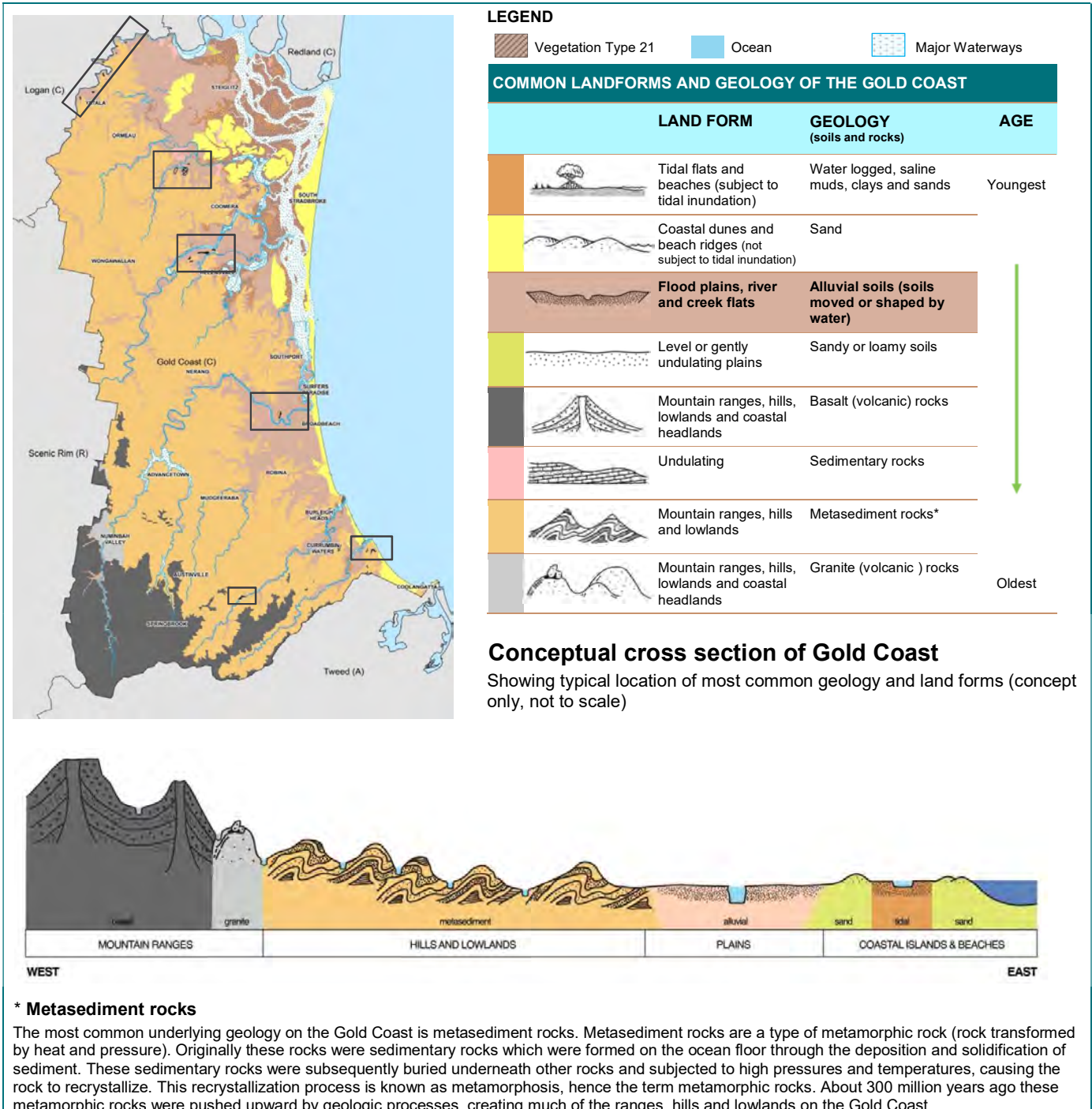
The City of Gold Coast recognises species which are locally significant as City-wide significant (CWS) species. These species are important because they may be threatened, restricted to the Gold Coast, or at the edge of their geographic range. No City Wide Significant plant species are listed for this 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.

Ephemeral wetlands occur on alluvial terraces and river floodplains in low-lying areas across the Gold Coast, and are particularly common on old watercourses of the Logan and Albert Rivers. This vegetation type often occurs as small patches on river terraces that are either too small to map, or are included with other wetland communities (such as VT6, VT8, VT8a, VT9 and VT15) which are dominated by Broad-leaved Paperbark (*Melaleuca quinquenervia*) and/or Forest Red Gum (*Eucalyptus tereticornis*). Large areas mapped as ephemeral wetlands occur at Currumbin (Sanctuary), Pimpama and at Wolfdenne along the Albert River. Other smaller unmapped areas of this community can be expected on all river floodplain areas.

Historic distribution of Vegetation Type 21



2017 EXTENT AND CONSERVATION STATUS

Gold Coast

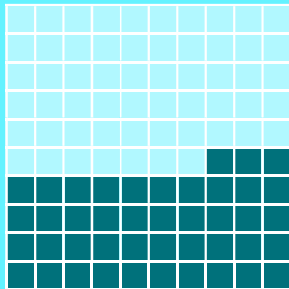
Historically, one of the least common types of vegetation on the Gold Coast. The 2017 extent* of this vegetation type on the Gold Coast was 30 hectares.

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

EXTENT (ha)

Historic
70 ha

2017*
30 ha
43% of
historical
extent

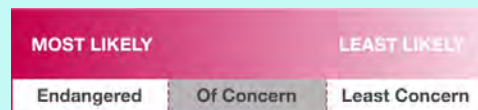


* Extent as mapped in 2017. Includes remnant vegetation only. Does not include disturbed remnant or regrowth.

Queensland

The conservation status of vegetation in Queensland is specified under the *Vegetation Management Act 1999*, which lists this regional ecosystem (RE 12.3.8) as being 'Of 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

Ephemeral wetlands are dependent on natural water flow and are particularly sensitive to changes in ground level both where they occur and also within the local catchment that feeds water into them. They are therefore threatened by clearing, earthworks and development within their catchments. These vegetation communities are particularly prone to invasion by exotic weeds, particularly floating aquatic plants such as Water Hyacinth (*Eichhornia crassipes*) and wetland grasses such as Para Grass (*Brachiaria mutica*). Weed control is therefore critical to the preservation of these wetlands, and control methods also need to be sensitive to aquatic fauna.

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, and/or
- 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, and/or
- 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.