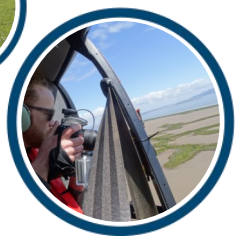
Gladstone Healthy Harbour Partnership

MANGROVES



FIVE FAST FACTS

1. Mangroves are coastal ecosystems consisting of flowering trees and shrubs adapted to marine and estuarine conditions.
2. Exposed breathing roots, salt-excreting leaves and live water-dispersed propagules help mangroves to cope with tidal inundation and salt saturated, oxygen poor soils.
3. Mangroves provide valuable **HABITAT** for important aquatic species like barramundi, mud crab, and prawns.
4. Coastal mangroves protect seagrass and coral communities by filtering catchment runoff and limiting shoreline erosion.
5. Owing to their environmental importance mangroves are protected in Queensland under the Queensland Fisheries Act 1994.

THE GRADES

2018	2019–21
C	C

Grading system

- A Very good (0.85 - 1.00)
- B Good (0.65 - 0.84)
- C Satisfactory (0.50 - 0.64)
- D Poor (0.25 - 0.49)
- E Very poor (0.00 - 0.24)

HOW ARE MANGROVES MEASURED?

Mangroves occur in tidal wetlands in all 13 GHHP reporting zones. **THREE** sub-indicators of mangrove health are used in all zones:

1. Mangrove extent — measures the proportion of mangroves and salt march to salt pan area in the wetlands.
2. Mangrove canopy condition — mangrove canopy density (number of leaves) provides an indication of current mangrove health. Healthy forests typically have a dense canopy cover.
3. Shoreline condition — Shoreline mangroves can respond rapidly to changes in water quality, climate and tidal conditions.

Mangrove distribution has changed considerably since the 1940s especially around the central port area. Hence, changes to mangrove distribution are measured against the five-year period from 2013/14 data.

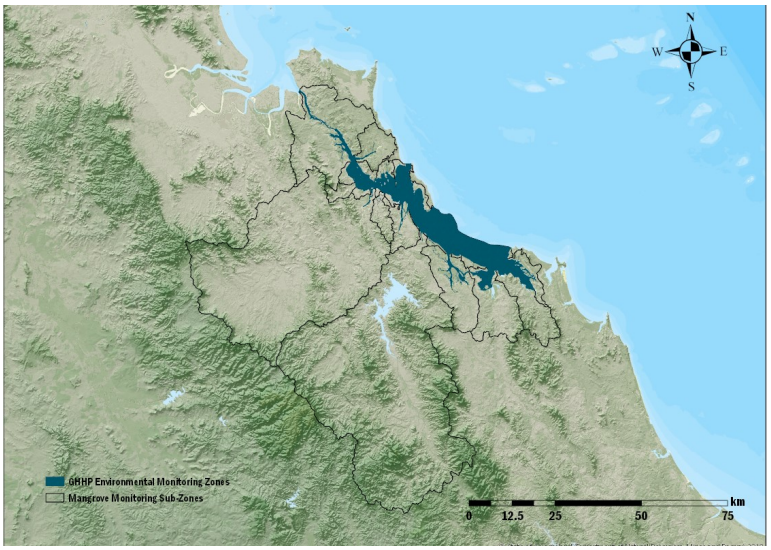
Data collection for this indicator occurs every five years. Fieldwork was last conducted in 2019 and will be conducted

WHAT DO THE GRADES MEAN?

In 2021 the overall condition for mangroves was **SATISFACTORY**. Some zones had lower scores for canopy condition which may be a result of the below average rainfall.

However, overall 11 zones were considered to be in a satisfactory or good condition and only two zones Boat Creek and Boyne Estuary were in poor condition.

MANGROVE SITES MONITORED BY GHHP



Mangroves are monitored in the sub-tidal wetlands that surround Gladstone Harbour. As mangrove health can be influenced by the surrounding catchment

JCU/TropWater were a direct contributor to this indicator.

For more information on mangroves monitoring in Gladstone Harbour visit www.ghhp.org.au or visit our Facebook page.