



Gladstone  
Healthy Harbour  
Partnership

# CORAL



## FIVE FAST FACTS

1. Coral reefs provide spawning, nursery and feeding areas for fish and other sea creature like sea cucumbers, sea beers, molluscs and turtles.
2. There were 21 different species of corals identified in the 2016 surveys of Gladstone Harbour.
3. Coral cover, coral cover change, juvenile coral density and macroalgal cover all determine the Gladstone Harbour report card score for coral.
4. Freshwater run-off (flooding) reduces salinity levels in the water and is a recognised caused of coral mortality.
5. Underwater divers conduct surveys at each site in Gladstone Harbour in May each year.

## THE GRADES

2015	2016	Grading system
<b>E</b>	<b>E</b>	<b>A</b> Very good (0.85 - 1.00)
		<b>B</b> Good (0.65 - 0.84)
		<b>C</b> Satisfactory (0.50 - 0.64)
		<b>D</b> Poor (0.25 - 0.49)
		<b>E</b> Very poor (0.00 - 0.24)

## ? HOW IS CORAL MEASURED?

Coral surveys in Gladstone Harbour are conducted by team of scientists from the Australian Institute of Marine Science. Underwater divers conduct surveys at each site.

**Four** coral indicators are measured to calculate scores for the Gladstone Harbour report card:

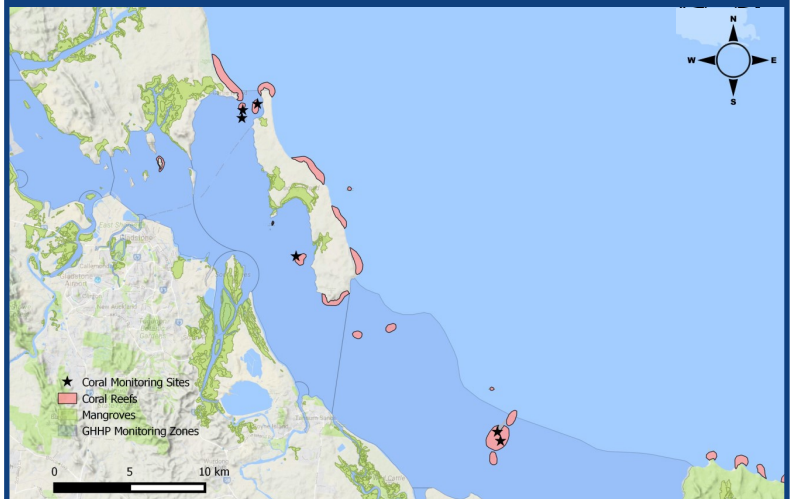
1. Coral cover– determines how much coral (hard & soft) are at each of the monitoring sites.
2. Macroalgal cover- large fleshy seaweeds (Macroalgae) compete with coral for space on the reef. The more macroalgae the lower the report card score.
3. Juvenile coral density– investigates the potential ability of a coral reef to recover from a disturbance. A high score for juvenile coral density indicates that a reef is growing.
4. Coral cover change- measures the change in coral cover at the monitoring sites from one year to the next and allows long-term trends to be recorded.

## ? WHAT DO THE GRADES MEAN?

Coral communities in Gladstone Harbour remain in a very poor condition due to low coral cover and a high percentage of macroalgae cover. The current coral condition is a result of flooding in 2013. Freshwater run-off (flooding) reduces the salinity levels in the water and is a recognised cause of coral mortality.

Although coral is in a poor condition, the 2016 surveys found 17 species of juvenile corals within the six GHHP monitoring sites. This indicates that conditions for growth of juvenile corals has improved and that Gladstone's corals are recovering from previous impacts.

## CORAL SITES MONITORED BY GHHP



*Coral is monitored in two GHHP Zones: Mid Harbour and Outer Harbour*