



Gladstone  
Healthy Harbour  
Partnership

# WATER & SEDIMENT



## FIVE FAST FACTS

1. Water and sediment is an indicator of the environmental component of the Gladstone Harbour Report Card.
2. A large number of catchment-related, human impact and climatic factors play a role in determining the water and sediment quality recorded in the Gladstone Harbour.
3. **FIFTY** sites within the thirteen GHHP harbour zones are monitored.
4. There has been very low levels of dissolved metals recorded across the harbour which has contributed to consistently **VERY GOOD** grades for the indicator.
5. The overall Water and Sediment grade has been rated **GOOD TO VERY GOOD** in all Gladstone Harbour Report Cards.

## THE GRADES

2016	2017	2018	Grading system
<b>B</b>	<b>A</b>	<b>A</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 WATER & SEDIMENT MEASURED?

Water and sediment quality monitoring is conducted by the Port Curtis Integrated Monitoring Program (PCIMP) and the results are made available to GHHP for use in the Gladstone Harbour Report Card. Water quality monitoring is conducted quarterly and sediment is sampled annually.

**Three water quality** indicators are measured to calculate scores for the Gladstone Harbour Report Card:

**Physicochemical measurements:** pH and turbidity

**Nutrients:** concentrations of total nitrogen, total phosphorus and chlorophyll-a

**Metals:** the levels of aluminium, copper, lead, manganese, nickel and zinc in the water.

**Six** different metal levels are tested to determine the **sediment quality**:

- arsenic
- cadmium
- copper
- lead
- nickel
- zinc

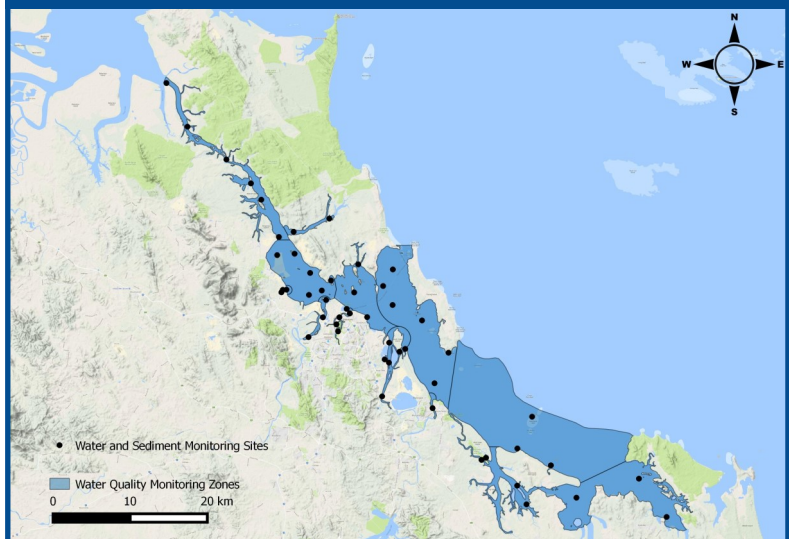
## WHAT DO THE GRADES MEAN?

The overall water and sediment quality grade is generated from the combined testing results of both water and sediment quality.

**Water quality:** very low levels of dissolved metals were recorded across the harbour resulting in consistent grades (very good). However, low scores for nutrients reduced the water quality score in some estuarine zones.

**Sediment quality:** high scores were recorded in all monitoring zones owing to very low concentrations of all metal measures.

## WATER & SEDIMENT SITES MONITORED BY GHHP



Water and sediment is tested at 50 sites within the 13 GHHP monitoring zones.

GHHP Partner, PCIMP was a direct contributor to this indicator

For more information on water and sediment monitoring in Gladstone Harbour visit [www.ghhp.org.au](http://www.ghhp.org.au) or visit our Facebook