



Gladstone
Healthy Harbour
Partnership



2018 GLADSTONE HARBOUR REPORT CARD

Independently monitoring
& reporting on the health of
Gladstone Harbour

Healthy Harbour, Healthy Future

Environmental Results



unchanged
2017 to 2018

medium
confidence

ENVIRONMENTAL	SCORE	GRADE
OVERALL ENVIRONMENTAL	0.61	C
Water & Sediment	0.86	A
- Water	0.76	B
- Sediment	0.95	A
Habitats	0.41	D
- Seagrass	0.40	D
- Coral	0.24	E
- Mangroves	0.60	C
Fish & Crabs	0.58	C
- Fish	0.66	B
- Mud crabs	0.49	D

The overall grade for Environment remained satisfactory (C). The grade for water and sediment quality remained very good (A), the grade for fish and crabs remained satisfactory (C) and the score for habitats was poor (D). Mangroves were included in habitats for the first time in 2018 and were assessed in all 13 environmental reporting zones. The inclusion of mangroves completes the habitat indicator group and resulted in 6 additional zones receiving a score for habitats.

Cultural Results



unchanged
2017 to 2018

medium
confidence

CULTURAL	SCORE	GRADE
OVERALL CULTURAL	0.60	C
Sense of Place	0.65	B
- Distinctiveness	0.56	C
- Continuity	0.53	C
- Self-esteem	0.74	B
- Self-efficacy	0.59	C
- Attitudes to Gladstone Harbour	0.83	B
- Values of Gladstone Harbour	0.65	B
Cultural Heritage	0.54	C
- Physical condition	0.56	C
- Management strategies	0.52	C

The grade for Cultural remained satisfactory (C). The grade for sense of place remained good (B) with cultural heritage remaining satisfactory (C). The Indigenous cultural heritage framework has been simplified for the 2018 report card resulting in less measures used than in 2017. Similar to previous years, Elders and Traditional Owners were consulted during the site assessments.

Social Results



unchanged
2017 to 2018

high
confidence

SOCIAL	SCORE	GRADE
OVERALL SOCIAL	0.67	B
Harbour Usability	0.63	C
- Satisfaction with harbour recreational activities	0.70	B
- Perceptions of air & water quality	0.58	C
- Perceptions of harbour safety for human usage	0.61	C
Harbour Access	0.67	B
- Satisfaction with harbour access	0.72	B
- Satisfaction with boat ramps & public spaces	0.66	B
- Perceptions of harbour health	0.63	C
- Perceptions of barriers to access	0.65	B
Liveability / Wellbeing	0.70	B
- Liveability / wellbeing	0.70	B

The grade for Social remained good (B). Results were consistent with the previous year where community perceptions on harbour usability was satisfactory (C) and harbour access was good (B). This year a new aesthetic value measure contributes to the liveability and wellbeing indicator. The importance of the aesthetic aspect of the Gladstone Harbour was highlighted in previous social survey results. The Social component results reflect how Gladstone Harbour contributes to the wellbeing and lifestyle of the local community.

Economic Results



unchanged
2017 to 2018

high
confidence

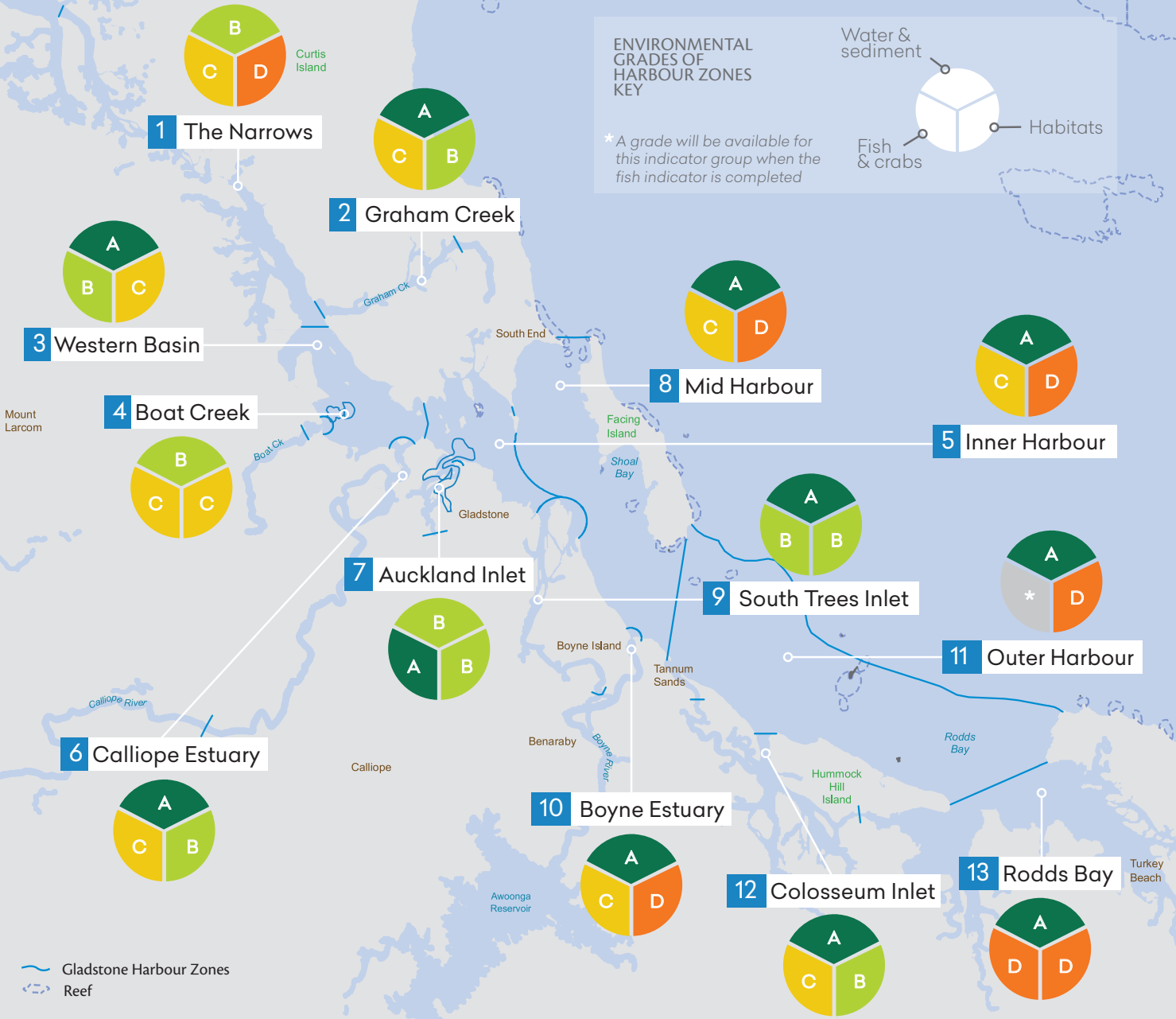
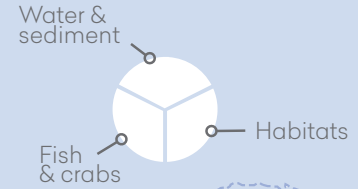
ECONOMIC	SCORE	GRADE
OVERALL ECONOMIC	0.72	B
Economic Performance	0.90	A
- Shipping activity	0.90	A
- Tourism	0.90	A
- Commercial fishing	0.35	D
Economic Stimulus	0.58	C
- Employment	0.44	D
- Socio-economic status	0.64	C
Economic Value (Recreation)	0.74	B
- Land based recreation	0.76	B
- Recreational fishing	0.68	B
- Beach recreation	0.75	B
- Water-based recreation	0.75	B

The Economic grade remained good (B) with the economic performance indicators the same as 2017. The employment grade declined from satisfactory (C) to poor (D) and the socio-economic status declined from good (B) to satisfactory (C), evidence of lower economic conditions. The economic value (recreation) contains a new water-based recreation indicator with the overall grade remaining good (B).

Environmental Grades of Harbour Zones

ENVIRONMENTAL GRADES OF HARBOUR ZONES KEY

* A grade will be available for this indicator group when the fish indicator is completed



Grading, Confidence & Trends

Grades for this report card were calculated using 32 indicators derived from 91 different measures of the environmental, social, economic and cultural health of Gladstone Harbour. The components and indicator groups were graded A, B, C, D or E, based on the scores of the measures specific to each component.

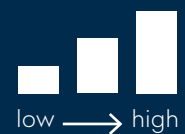
Confidence levels for the component grades were measured on a three point scale. Low, medium and high levels were established to reflect the confidence of the Independent Science Panel (ISP) in the calculated grades. The confidence levels are affected by multiple factors, including the completeness of indicators used and quality of monitoring data.

Changes in grades for components from the 2017 to 2018 report cards are presented as improved, declined or unchanged.

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)
- Data not available

CONFIDENCE

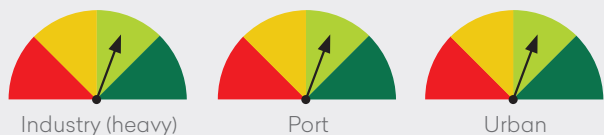


CHANGE 2017 to 2018

- improved
- declined
- unchanged

Stewardship

Stewardship is defined as 'responsible planning and management actions'. The framework describes and evaluates environmental management efforts around and in Gladstone Harbour. It captures information on management efforts to maintain or improve harbour health and water quality. It is based on the nationwide State of the Environment Report management effectiveness framework.



RATING SYSTEM

■ Not Effective
 ■ Partially Effective
 ■ Effective
 ■ Fully Effective

↔ unchanged 2017 to 2018

For the full Stewardship Report refer to www.ghhp.org.au



Research Highlights

MANGROVES

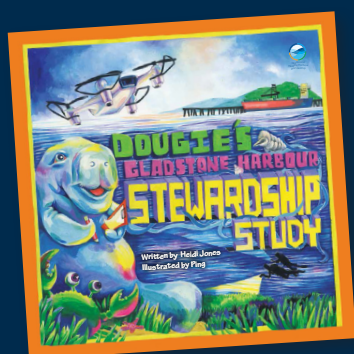
Mangroves are a key component of Gladstone's natural environment. They protect shorelines from the impacts of storms, improve water quality and provide valuable habitat for barramundi, mud crabs, prawns and sea turtles. New satellite imagery and aerial photography have been used to report on the health of mangroves by covering all 13 GHHP environmental reporting zones. Analysis of these images provide a measure of mangrove canopy condition (health) and over time, changes to the area occupied by mangroves. Shoreline condition, which assesses the proportion of dead mangroves within the shoreline trees, was determined from aerial photography.

CORAL CORING

A coral coring study has been undertaken on Gladstone Harbour to study environmental trends in the harbour over the past 100 years. This research involved taking narrow cores of coral from some of the larger out crops in the harbour, and then analysing their profiles. Results will show the history of the harbour from the 1960s and the extent of freshwater plumes dating back to the early 1900s. Understanding the historic trends may help us to explain why coral scores are remaining very low in the harbour.

FISH HEALTH

Fish are key biological indicators of environmental condition, as they are exposed to wide range human and environmental pressures during their life. The report card has a fish recruitment indicator based on two juvenile bream species, the pikey bream and yellowfin bream. GHHP has been monitoring these species in nursery habitats around Gladstone Harbour since 2016. Other fish health research projects underway capture data from net sampling in harbour zones as well as data from fishing competitions such as the Boyne Tannum HookUp.



OUT NOW

Read how Dougie learns about who's looking after our harbour.

Acknowledgement of Country

The Gladstone Healthy Harbour Partnership acknowledges the Traditional Owners of the land and sea in the Port Curtis Coral Coast region, the Gurang, Gooreng Gooreng, Taribelang Bunda and Bailai people, and pays respect to the ancestors, the Elders both past and present, and to the people.

The Gladstone Harbour Report Card 2018 was produced with the support of our partners:



For more information, resources and fact sheets please contact:



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