



Gladstone
Healthy Harbour
Partnership



GLADSTONE HARBOUR PILOT REPORT CARD 2014



Introduction

The Gladstone Healthy Harbour Partnership (GHHP) presents the Gladstone Harbour Pilot Report Card 2014. The results of the primary testing of the environmental, social and economic components of the Harbour are reported on in the Pilot Report Card. Results from the completed testing of the four components including cultural, will be available in the first fully completed Report Card in 2015 to be produced annually. Feedback received from the 2014 Pilot Report Card will shape the design of the 2015 Report Card.

Developing the Gladstone Harbour Report Card began with the community's vision that 'Gladstone has a healthy, accessible, working harbour'. This vision has formed the focus of the Pilot Report Card and allows all stakeholders to have confidence in the efforts to maintain and, where necessary, improve the health of the Harbour. VISION > INDICATORS > GRADES

GHHP has chosen indicators recommended by the Independent Science Panel to measure the health of the harbour, with each indicator being analysed and graded. For more information, visit www.ghhp.org.au.

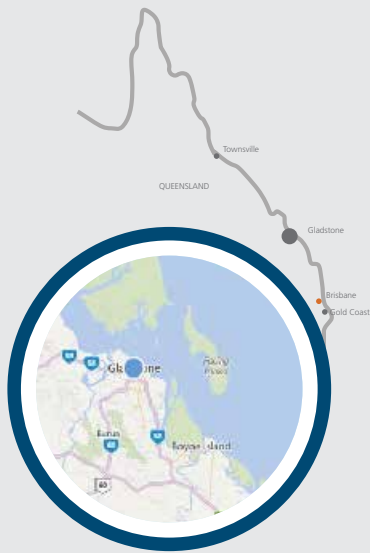


Figure 1. (above) Gladstone Harbour is a natural deepwater harbour notably contributing to the national and global economy delivering cargoes all over the world. The harbour is also valued by the local community as a place of recreation and a gateway to the nearby islands. Gladstone Harbour is an integral part of the Central Queensland Region.

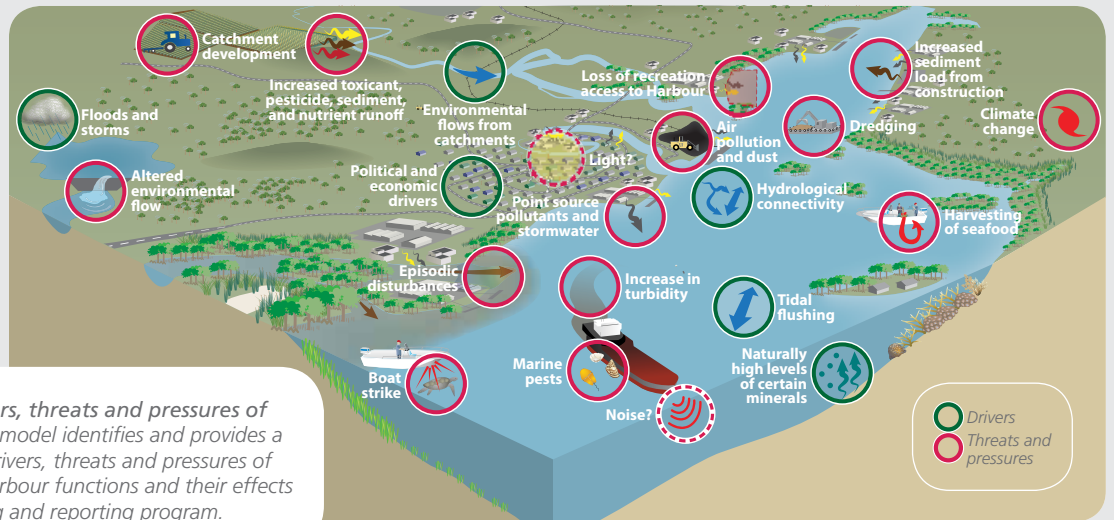


Figure 2. (right) Environmental drivers, threats and pressures of Gladstone Harbour. This conceptual model identifies and provides a clear understanding of how specific drivers, threats and pressures of Gladstone Harbour link to how the harbour functions and their effects on the development of the monitoring and reporting program.

Indicators used to monitor harbour health

The indicators were chosen following extensive community consultation on the GHHP vision. Indicators have been grouped into four components reflecting the environmental, social, economic and cultural dimensions of Harbour health.

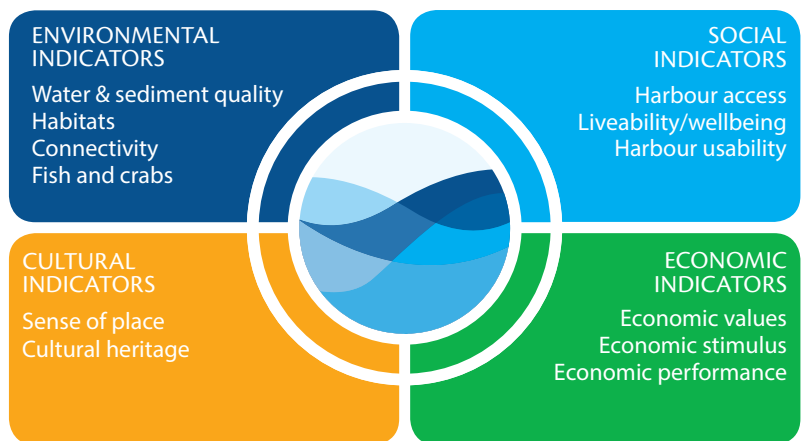


Figure 3.

Grading

Grades for this Pilot Report Card were calculated using all available data on water quality, social health and economic health for the 2013-2014 year. The environmental results should be considered to be preliminary as they are based on water quality only, which is a small subset of the indicators that will be used in report cards from 2015 onwards to determine the overall environment grade. More comprehensive indicators will be released in future years as additional monitoring is completed and more information becomes available. All indicators to be used in future report cards are shown in this Pilot Report Card. The indicator has been shaded grey where data for the indicator is not available this year.

Grading system

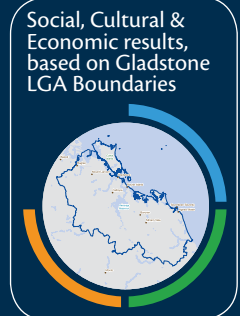
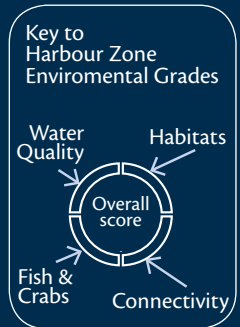
- A = Very good
- B = Good
- C = Satisfactory
- D = Poor
- E = Very poor
- Data not available this year

The condition of each indicator is reported using a traffic light system.

Gladstone Harbour Health: The 2014 Pilot Results



These are preliminary grades only, and are based on a subset of indicators for Water Quality only.



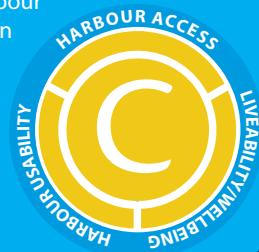
ENVIRONMENTAL RESULTS

Water quality in Gladstone Harbour in between July 2013 and June 2014 was provisionally classified as satisfactory. In addition to water quality, the first complete report card in 2015 will include grades for habitat, connectivity and fish and crabs.



SOCIAL RESULTS

The Gladstone community values its harbour very highly, with the harbour making a positive contribution towards the lifestyle and wellbeing members of the community.



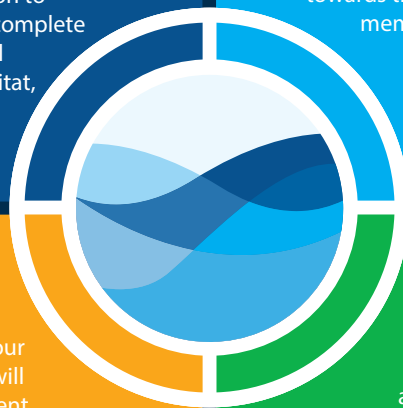
CULTURAL RESULTS

Indicators for the Cultural Health of Gladstone Harbour are not yet available and will require more development.



ECONOMIC RESULTS

The Gladstone community derives significant economic benefit from its harbour, although there have been declines in some sectors.



Stewardship of the Harbour

Management of Gladstone Harbour is the responsibility of many of our partners and members of the community. We all have a role to play and there are many positive examples of innovative and responsible management. Information on management efforts across different sectors will be presented in a "stewardship" section of the report card from 2015 onwards. A number of reporting frameworks are currently in place for the agriculture and urban sectors and new frameworks are being investigated for ports and industry so that we can report progress towards leading practice across all of the sectors.



Stewardship Case Study

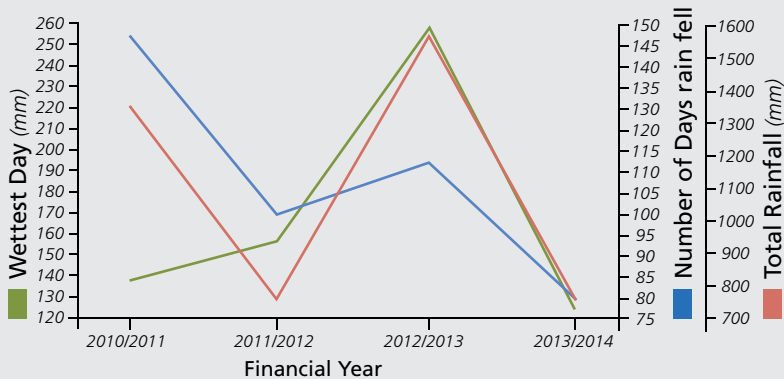
Port Curtis Harbour Watch is an Australia Pacific LNG funded initiative of the Gladstone Local Marine Advisory Committee (LMAC) - created by the Great Barrier Reef Marine Park Authority (GBRMPA). The Gladstone LMAC is active in raising community awareness of the marine environment and is establishing a science-based monitoring program of harbour water quality. The three year initiative will expose students to the practice of science in contemporary and socially engaged settings by providing a contextual learning environment that will enable integration of marine science concepts.

Gladstone Rainfall

Large rainfall events and extended dry seasons can impact upon the health of our waterways year to year. The figure below shows Gladstone rainfall data for the past four (4) years. Rainfall in 2013-2014 was a lower than average rainfall total with fewer days of rainfall. The Pilot Report Card contains information and data that was available for the 2013-2014 year. Rainfall can be one of many factors that impact upon the water quality results with the Pilot Report Card.

Figure 5. Gladstone Rainfall Information

(source: willyweather.com.au)

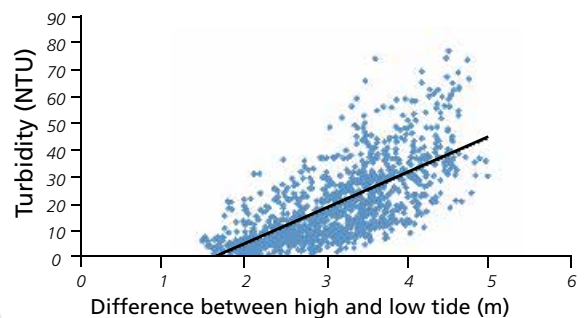


Did you know?

Monitoring data shows that the cloudiness of the harbour, or the "turbidity", is linked to tides. The larger the tides, the cloudier the water.

Figure 6. Effects of Tide on Turbidity

(source: Queensland Government 2014)



Iconic species of Gladstone Harbour

Gladstone Harbour provides important habitat, breeding and roosting sites for a number of protected marine species. These include dugong, the Indo-Pacific humpback dolphin, three species of marine turtle (Flatback, Green, Loggerhead) and around eighteen species of migratory shorebird. While many of these species are of great interest to the local and broader community, they may not provide ideal indicators of overall harbour health, as many of these species are migratory, so population changes may be due to impacts outside the harbour. Research into the number, distribution and health of these species is vital to understanding and managing both the natural and human impacts on them. The first complete report card in 2015 will include information from ongoing research and monitoring activities of these species.



Key messages



- 1 This Pilot Report Card demonstrates the structure and format of the first report card, tests the methods for analysing and combining data to obtain report card scores, and provides an opportunity for stakeholders and the community to comment on its content and approach.
- 2 This Pilot Report Card is based on indicators of water quality, social health and economic health between July 2013 and June 2014. This is subset of the much wider data set and suite of indicators that will be used in the first full report card in 2015.
- 3 All information and data used in this Pilot Report Card has been provided from a variety of sources for the calculation of scores, and assessed for quality assurance by the Gladstone Healthy Harbour Partnership Independent Science Panel. The Independent Science Panel is made up of scientists who are renowned and respected leaders in their fields of expertise.
- 4 Overall, the Pilot Report Card results indicate that environmental health is a C, social health is a C and economic health is a B. Environmental results vary across the Harbour Zones with the best results in Inner Harbour and the worst in Auckland Inlet.
- 5 In noting how the results were obtained it should also be noted that annual rainfall was below average, no major shipping incidents were recorded and there were no major dredging activities during the year, all of which likely influenced the grades.

Figure 7. Comparison of indicator groups reported in the 2014 Pilot and to be reported in the 2015 Report Card

Component & Indicator Group	2014 PILOT	2015
ENVIRONMENT (Overall Grade)	✓	✓
Water & Sediment Quality	✓	✓
Habitats		✓
Connectivity		✓
Fish & crabs		✓
SOCIAL (Overall Grade)	✓	✓
Harbour access	✓	✓
Liveability/wellbeing	✓	✓
Harbour usability	✓	✓
CULTURAL (Overall Grade)		✓
Sense of place		✓
Cultural heritage		✓
ECONOMIC (Overall Grade)	✓	✓
Economic values	✓	✓
Economic stimulus	✓	✓
Economic performance	✓	✓

Timeline of progress



HAVE YOUR SAY

We are seeking your feedback

This Pilot Report Card is an opportunity for members of the community to have your say.

- What do you like about the report card?
- How could the report card be improved to better communicate the health of Gladstone Harbour?



Your feedback will help inform the development of the 2015 Report Card. Register your interest to attend a feedback session at www.ghhp.org.au, or email info@ghhp.org.au with your views.

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.



Gladstone Harbour

A working port rich in marine resources

The Port of Gladstone is Queensland's largest multi-commodity port and the world's third largest coal exporting terminal. It is a working Harbour that supports a significant mining and gas industry in western Queensland. Land use around Gladstone Harbour includes urban areas, industry, grazing and protected areas. Gladstone Harbour is also unique because it is a working port and part of the Great Barrier Reef World Heritage Area, supporting a range of marine plants and animals as well as an important fishing industry.



A partnership approach

The Gladstone Healthy Harbour Partnership (GHHP) is a forum to bring together parties (including community, industry, science, government, statutory bodies, and management) to maintain, and where necessary, improve the health of Gladstone Harbour. The guiding principles of the Partnership are open, honest, and accountable management, annual reporting of the health of the Gladstone Harbour, and management recommendations and action based on rigorous independent science and strong stakeholder engagement to ensure the ongoing and continuous improvement in the health of Gladstone Harbour.

Acknowledgements

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Our thanks goes out to general service providers:

- Central Queensland University
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- Department of State Development, Infrastructure and Planning Gladstone Office
- Gladstone Region Environmental Advisory Network

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