

Healthy Harbour, Healthy Future

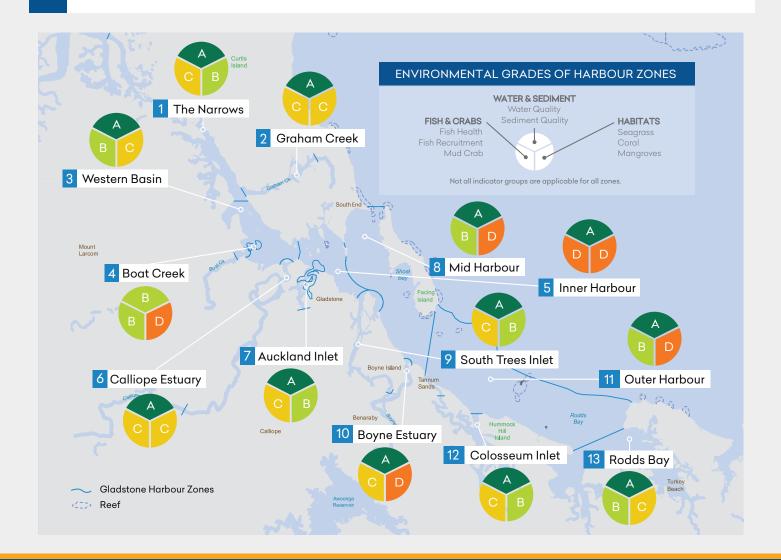
The 2023 report card showcases monitoring data collected between July 2022 and June 2023. Nine years of reporting has shown some indicators are stable each year, therefore there was no new assessment of the Social and Cultural indicators in 2023; results are carried over from the 2022 report card. The 2023 report card presents a partial assessment of the Economic indicators, with Economic Value results repeated from the 2022 report card. Results from the Environment indicators Mangroves and Fish Health Assessment Index have carried over from 2019 and 2021, respectively. The 2024 report card will present new Mangroves results.



ENVIRONMENTAL	SCORE	GRADE
OVERALL ENVIRONMENTAL	0.63	С
WATER AND SEDIMENT QUALITY	0.89	A
Water Quality	0.81	В
 Sediment Quality 	0.97	Α
HABITATS	0.43	D
Seagrass	0.58	С
• Coral	0.14	Ε
Mangroves	0.57	С
FISH AND CRABS	0.57	С
• Fish Health	0.81	В
Fish Recruitment	0.47	D
• Mud Crab	0.51	С

In 2023 the overall Environmental grade was satisfactory (C). Water and sediment quality score (0.89) remained high and received a very good grade (A), consistent with the 2022 report card results. The overall grade for the Habitats indicator group was poor (D). This was largely due to a very low Coral score (0.14), similar to previous years. Compared to the 2022 report card Seagrass scores (0.58) declined and received a satisfactory grade (C). Mangroves were not assessed in 2023 and the scores are carried over from 2019.

The overall grade for the Fish and Crabs was satisfactory (C). Compared to the 2022 report card the Fish Health score remained consistently high (0.81) while the Fish Recruitment score declined (0.47) and the Mud Crabs score increased (0.51), resulting in an improved grade of satisfactory (C).



SOCIAL RESULTS

CULTURAL RESULTS

ECONOMIC RESULTS





uses previous results



There was no new assessment of the Social indicators this year; results have carried over from the 2022 report card. The overall Social grade has been consistently good (B) since 2016.





uses previous results



There was no new assessment of the Cultural indicators this year. Sense of Place was assessed in 2022 and Indigenous Cultural Heritage in 2018, and these results have been repeated. The overall Cultural grade was satisfactory (C).







high confidence

In the 2023 report card, scores from new assessment of the indicators Economic Performance (0.87) and Economic Stimulus (0.63) were very similar to the 2022 report card (0.90 and 0.64, respectively). The Economic Value results were carried over from the 2022 report card. Overall, the Economic component received a good grade (B).

GRADING, CONFIDENCE & TRENDS

Grades for the 2023 report card were calculated using 33 indicators derived from 107 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 and measures specific to each component.

Confidence levels for the component grades were measured on a three-point scale and reflect accuracy of the data to the 2023 report card. Further information on confidence rating is available within the 2023 Technical Report. Changes in grades for components from the 2022 report card are presented as improved, declined, unchanged or uses previous results.

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)

SHANGE (2022 - 2023)



improved



declined



unchanged



uses previous

CONFIDENCE

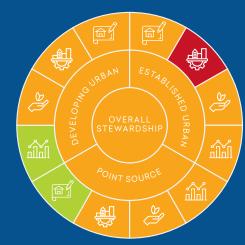


 $low \rightarrow high$

URBAN WATER STEWARDSHIP FRAMEWORK

Urban water management activities were assessed across three primary groups: Activities that may contribute to diffuse pollution associated with **Developing Urban** areas and **Established Urban** areas and activities that may contribute to **Point Source** pollution (associated with sewage treatment and sewer network management).

Based on the Queensland Government's Urban Water Stewardship Framework assessment process, Gladstone Regional Council's overall level of urban water management practice was graded satisfactory (C), with all three framework components receiving a satisfactory grade (C). This represents a level of practice that is in line with the current minimum standards. Notably, the



Planning & Governance



Infrastructure Management & Maintenance



Social Approaches



Monitoring, Evaluation, Reporting & Improvement







Superseded or out of date standard

planning and governance of Developing Urban and monitoring, evaluation, reporting, and improvement of Point Source are currently performed in line with best practice.

HIGHLIGHTS

The 2023 Gladstone Harbour Report Card had several noteworthy highlights.



Water and Sediment quality received a very good grade (A) for the seventh year in a row. Sediment quality has maintained a very good grade (A) for nine consecutive years since it was first monitored in 2015.



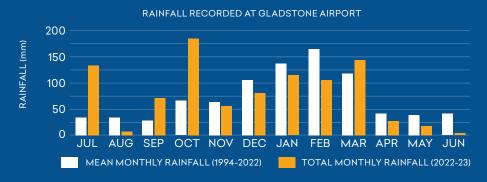
The overall grade for Mud Crabs improved to satisfactory (C), after five consecutive years receiving a poor grade (D). Across six zones monitored for Mud Crabs there was low prevalence of rust legions (scores ≥ 0.85) and three zones recorded good or very good scores (≥ 0.64) for sex ratio.



Although the overall Seagrass grade declined in monitoring period of the 2023 report card, meadows in The Narrows and Western Basin remain in good and very good condition (scores ≥ 0.64). This is the first time seagrass in The Narrows has been in very good condition (scores ≥ 0.85) for consecutive years.

GLADSTONE RAINFALL

Large rainfall events and extended dry seasons can impact the health of the harbour. In the monitoring period of the 2023 report card, annual rainfall at Gladstone Airport was above the long term average for the second consecutive year. Monthly rainfall in July, September and October were greater than twice the monthly average. Increase in rainfall may have contributed to the lower scores for the Water Quality sub-indicators Turbidity and Nutrients, as well as Environment indicators Seagrass and Fish Recruitment.





ACKNOWLEDGMENT 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 Elders past, present and emerging.

The Gladstone Healthy Harbour Partnership (consisting of the following partners) independently monitors and reports on the health of Gladstone Harbour, and in doing so provides this annual Report Card.





















































For more information, resources and fact sheets please contact:



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COMPLETED: December 2023