

Fitzroy Basin
**Report
© Card**
2022

Image – Port Alma,
Central Queensland.

for period July 2020
to June 2021

What impacts waterway health in the Fitzroy Basin?

To better understand how grades are calculated and what they mean, it is important to understand the drivers and pressures that impact waterway health. Drivers can include rainfall, ground cover, land use, geology, hydrology, and historical land clearing and dredging, which can all have variable effects on aquatic ecosystem health from year to year. Pressures such as agricultural activities, water use and storage, extractive industries and urban development also contribute to outcomes.

To support improved aquatic ecosystem health, management responses can include legislation and regulations; land, water and vegetation management practices; and efficient water and wastewater treatment. Fitzroy Partnership for River Health produces a Stewardship Report: *Being the change that is needed* each year, showcasing the management responses of our partners for a better water future for the Fitzroy Basin.

See more at riverhealth.org.au/water-stewardship



Citizen Science in Action

GET INVOLVED!

There is a growing movement towards citizen science - public participation in scientific research to increase knowledge of the environment. We have our own citizen science program - MyWater - where schools, groups and individuals can sample and test their local waterways and upload their results to our MyWater web portal.

Since 2012, over 230 samples have been taken by school groups and community members and entered into our MyWater portal! Get in touch to sample your local waterway and understand more about waterway health!



Fitzroy Basin 2020-21



.... →

Nogoa



Theresa



Mackenzie



Upper Isaac



Connors



Drill down to the detail at
riverhealth.org.au/report_card/ehi/

Comet



More than 483,400 data points from 215 sites have been assessed and analysed to develop Report Card grades for 2022.

Lower Isaac



Fitzroy



Upper Dawson



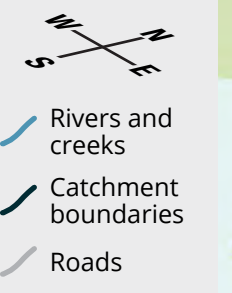
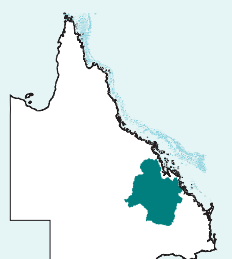
Lower Dawson



Callide



Estuary

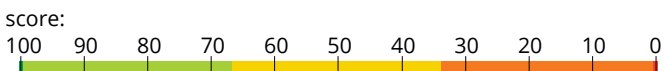


How do I interpret the Report Card information?

1. Various measures of water quality and biological health are assessed in the Report Card. These measures are grouped into categories shown by the icons below.



2. The colour of each icon is the score out of 100 for that category – see scoring ruler below. Sitting behind each score are 100s or even 1000s of water quality and ecology measurements for a catchment.



3. For each catchment the scores for each icon category are combined and then averaged to give a letter grade (A to E).



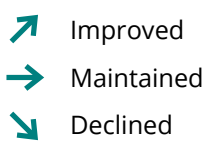
4. The scores for each catchment are then averaged to give an overall grade for the Fitzroy Basin.



5. A confidence rating is also included to help understand the extent of data and type of measurements that were available for each catchment for the year.



6. The arrow for each catchment shows the trend in the grade compared to last year.



Key messages

Overall result

The overall Ecosystem Health Index for the Fitzroy Basin waterways remained a C (Fair) Grade, with a score of 61 (compared to 62 in 2019-20). Over 11 years of reporting the Basin condition has remained largely consistent. This indicates that despite significant on-going industry activity, a growing population and climate impacts, the regulations, policy and management practices of industry, agriculture and government are working to maintain a resilient system in the Fitzroy Basin.

Rainfall

Catchment condition, rainfall levels and intensity, impact water quality. While erosion and run-off can negatively impact water quality in high rainfall years, a lack of flushing in times of below average rainfall can keep pollutants in-stream, also causing water quality issues. Catchment grades can be attributed predominantly to rainfall, which was once again below average across the Basin.

Improved

The Nogoa catchment score improved slightly overall due to improved nutrient and toxicant scores. There was a scarcity of available ecological data due to our ephemeral streams drying to remnant pools in some areas, however this is typical for the Basin during dry periods.

Declined

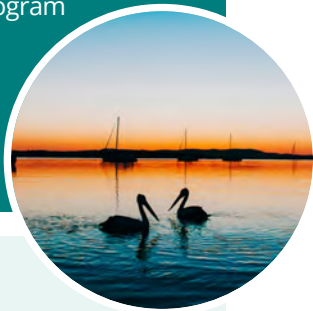
Whilst the grades for most catchments remained relatively stable, the Lower Isaac catchment grade declined overall due to a lower toxicant score and no ecology data. Without ecological data, it is difficult to get a complete picture of the health of the system.

Ecological data

Ecological data within the Fitzroy Basin is limited, resulting in reduced confidence in the catchment grade. This is being addressed with a new Basin-wide monitoring program in 2022 and the 2023 Report Card will show a marked difference in the quality and spread of data used to create the Report Card.

Future directions

We are working towards enhancing the Report Card with new indicators including human dimensions and incorporating an urban water stewardship framework. A 10-year data review is underway to fine tune the Report Card and associated program design for the benefit of the community, industry and government.



Marine grading

In 2022, the Partnership reintroduced marine grading to show inshore marine conditions adjacent to the Fitzroy Basin. Knowing the effects of pressures on marine habitats helps target management actions and inform the community.

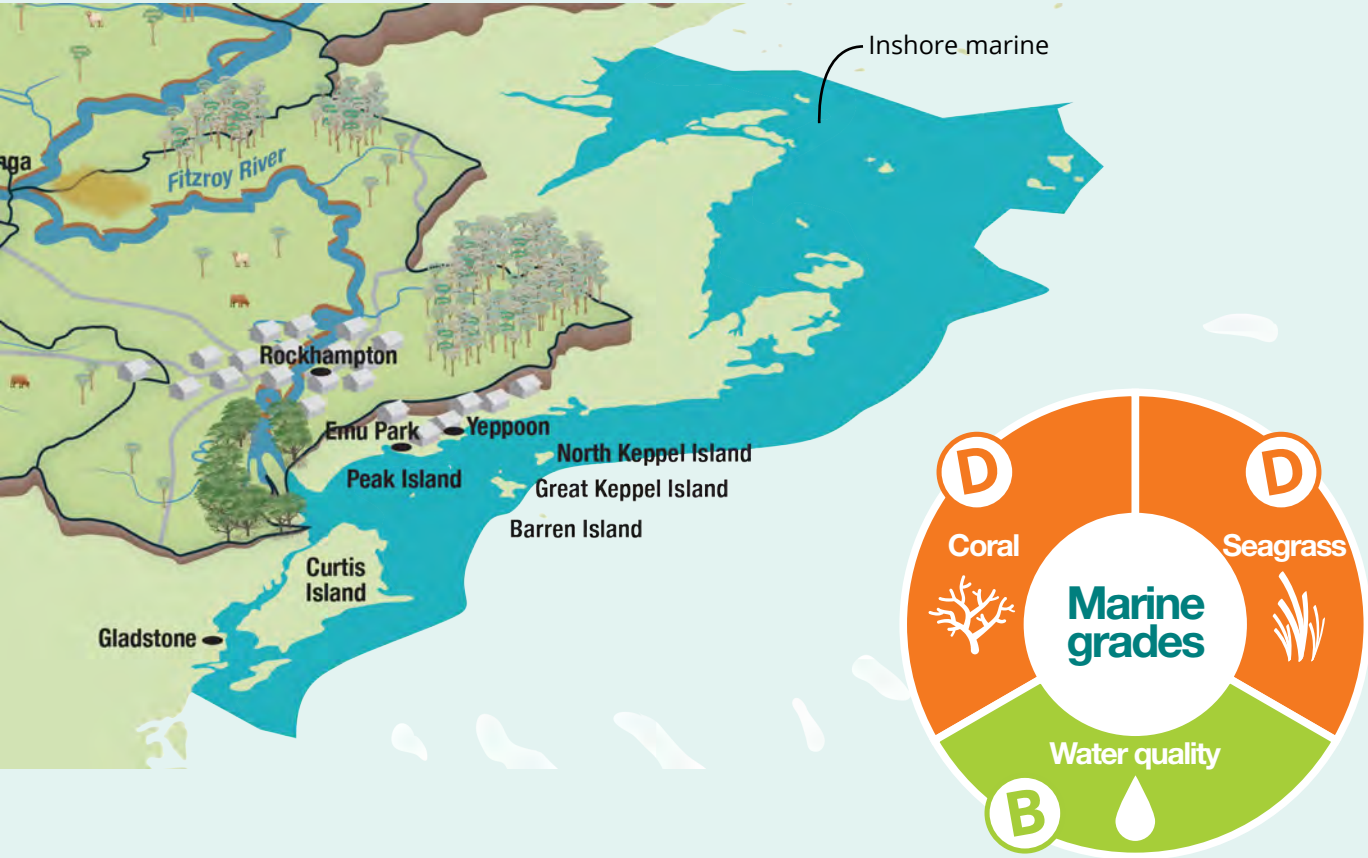
The marine monitoring data informs the Paddock to Reef Integrated Monitoring, Modelling and Reporting Program and is used to evaluate progress towards the Reef Plan 2050 Water Quality Improvement Plan targets, objectives, and outcomes. It also informs

New in 2022

progress against the objectives under the Reef 2050 Long-term Sustainability Plan.

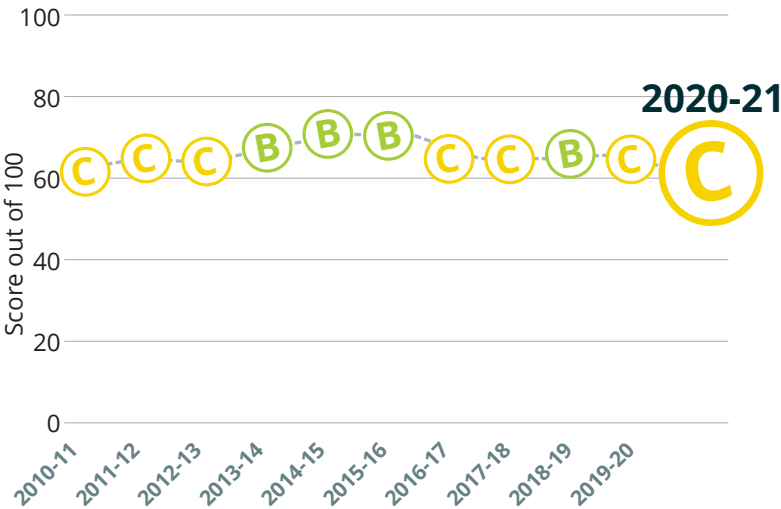
Marine monitoring reflects the condition and trend of important ecosystems in inshore waters and water quality. The inshore marine health of the Fitzroy region in 2020-21 examined three indicators: water quality, coral, and seagrass.

This grading is made possible by the Marine Monitoring Program coordinated by the Great Barrier Reef Marine Park Authority (GBRMPA) and water quality monitoring by Great Barrier Reef Foundation (GBRF) and major partners, the Australian Institute of Marine Science and James Cook University.



Fitzroy Basin Trends

Over time, trends in scores offer an understanding of resource management changes and climate events that influence the condition of waterways. This graph presents the overall Fitzroy Basin grade over time and indicates that overall aquatic condition has remained fair to good since 2010-11. Grades can be tracked for each of the 11 catchments and the estuary, at www.riverhealth.org.au/report_card/ehi/trend.



First Nations in the Fitzroy

Australia is made up of many different and distinct Aboriginal and Torres Strait Islander groups, each with their own culture, language, beliefs and practices (Australian Institute of Aboriginal and Torres Strait Island Studies 2021). In the Fitzroy region, there are many First Nations People who have cared for the lands and waters for tens of thousands of years.

Fitzroy Partnership for River Health extends our deepest respect and acknowledgement to these traditional custodians of the waters and lands within the Fitzroy Basin and pay our respects to them, their cultures and Elders past, present and emerging.

We acknowledge the Barada Barna People, Widi People, Jangga People, Barada Kabalbara Yetimarala People, Gaangalu Nation People, Darumbal People, Koinjmal People, Woppaburra People, First Nations Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda People, Wulli Wulli Nation People, Wadja People, Iman/Jiman People, Western Kangoulou People, Kanolu People, Bidjara People, Karingbal People and Wangan and Jagalingou (Clermont-Belyando) People.

We recognise the Elders of the region's First Nations groups are responsible for decision-making about their country. Fitzroy Partnership for River Health is committed to acknowledging, engaging and communicating with First Nations Elders and peoples in this region with the support of our partners.

*This map is a stylised representation of First Nations who are actively registered as cultural heritage parties/bodies, Native Title Applicants and Registered Native Title Prescribed Body Corporates (RNTBC) within the Fitzroy region in June 2022.



This map and the names of First Nations were derived from National Native Title Tribunal (NNTT) datasets accessed in June 2022.

Source: www.nntt.gov.au. Information herein is provided in good faith and while every effort has been made to verify the accuracy of the information contained, Fitzroy Partnership for River Health recommends that readers exercise caution with respect to its use.



Katy Steele – Partnership Chair

10 years ago in 2012, the Fitzroy Partnership for River Health was officially launched. Born from community concern, the Partnership filled the need for independent, holistic understanding of water quality across the region.

I congratulate the Partnership on this, the 11th Report Card on Fitzroy Basin waterways. In addition to this Ecosystem Health Index, the Partnership also produces annual reports on Drinking Water, Water suitability for Crop and Agricultural Use, Citizen Science activities and a range of others, including, litter clean-ups. This year, the marine zone has been included and the Partnership will soon examine the results of our large community survey.

In more recent times, the Partnership has evolved to providing a platform for collaboration between organisations. We bring together all levels of government, resources sectors, agriculture, research, consulting and community to discuss and plan better management outcomes to protect the resilience of the ecosystem and also ensure we have adequate water resources to sustain our future.



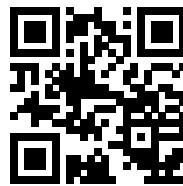
Dr Eva Abal – Independent Science Panel Chair

For the 2022 Report Card, 215 sites and 483,400 data points have been assessed to grade the aquatic ecosystem index of the Basin, and in a significant milestone we have also re-introduced marine reporting for the inshore marine zone. It is both timely and critical that marine assessment is once again included in our reporting considering our Basin is the second largest seaward draining basin in Australia and the largest draining to the east coast and the world-heritage listed Great Barrier Reef lagoon.

I would like to acknowledge the Independent Science Panel, many who have provided independent advice to Fitzroy Partnership for River Health since its establishment in 2012.



We recognise our valued partners



Find out more at
www.riverhealth.org.au

BHP



Queensland Government



Australian Government

Peabody



GLENCORE



Santos



sunwater



For more information: Fitzroy Partnership for River Health

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- admin@riverhealth.org.au
- [facebook.com/
FitzroyPartnership4RiverHealth](https://facebook.com/FitzroyPartnership4RiverHealth)
- Level 1, 80 East Street
Rockhampton, QLD 4700

A number of report cards are produced in relation to the environmental condition of waterways entering the Great Barrier Reef, including this one, with different purposes and coverage. The Reef Water Quality Report Card, jointly produced by the Queensland and Australian governments, focuses on tracking towards Reef 2050 Water Quality Improvement Plan targets (www.reefplan.qld.gov.au).

Regional Partnerships such as this one, produce region-specific report cards that provide an annual snapshot of the ecosystem health and the water quality condition of local waterways. For more details visit the *About - Regional Report Cards* section of our website – www.riverhealth.org.au.