

Fitzroy Basin Repagatorial Control of the second se

DAWSON RIVER HAROLD HINCHCLIFFE BRIDGE







Chair's message – Daniel Yates

2021 is a milestone year for Fitzroy Partnership for River Health: this is the tenth Report Card on the condition of waterways in the Fitzroy Basin and the adjacent estuarine zone. Scrutinised by our dedicated Independent Science Panel to ensure accuracy and use of the best available science, this annual report now provides a decade of independent data and information on the condition of the eleven catchments and estuary leading into the southern Great Barrier Reef lagoon. The members of our Fitzroy Partnership form a vital collective that work to support community confidence in the management of waterways in the Basin.

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 produced its first Stewardship Report in 2021: *Being the change that is needed*, showcasing the management responses of our partners for a better water quality future for the Fitzroy Basin.

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

Climate change

is predicted to increase the intensity of rainfall, floods and tropical cyclones which severely impact marine water quality and ecosystems. Rising sea levels, ocean acidification and warmer waters causing corals to bleach are also expected impacts.

Rivers and streams act as corridors for important species to move between freshwater, estuarine and marine environments. They also provide a pathway for pollutants.

Ground cover stabilises soil preventing gullies from forming and eroding soil causing sediment to flow to the Reef. Extractive industries Extractive Industries can affect natural waterways and contribute to sediments and toxicants that flow to the reef.

Modifications

to coastal ecosystems and creation of artificial barriers, such as dams and ponded pastures impact water quality. Agriculture

accounts for approximately 80% of land use in Reef catchments and is the main source of excess nutrients, fine sediments and pesticides that flow to the Reef.

Miga Man Million

Urban development including roads, footpaths and rooftops increases surface run-off which washes pollution into

waterways.

Aquatic and marine ecosystems provide important habitats for species such as fish, birds, and turtles to migrate to the Reef for breeding, feeding and shelter.

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Sediment

blocks light to and smothers corals and seagrass restricting growth.

> Cultural values and communities are supported by healthy waterways, delivering a range of benefits through access to resources, employment and recreation.

> > With permission, from the catchment to the reef www.reefplan.qld.gov.au

Fitzroy Basin 2019-20

How do I interpret the report card information?

1. The Report Card summarises data for various indicators, which are illustrated by specific icons. Use the icons to determine which indicator is being measured.



2. Check the colour of the icon associated with each catchment on the map to determine how that indicator scored.

A	B	0	D	E	N
100%	67-99%	33-67%	0-33%	0%	No
Excellent	Good	Fair	Poor	Fail	data



•••••	Very high		
••••0	High		
•••00	Moderate		
••000	Low		
••••••	Vanulaw		

4. How does the grade compare to last year? An arrow tells you whether the grade has gone up, down or stayed the same.





Sampling

More than 525,860 results, contributed by our Partners from 244 sites across the Basin, have been assessed and analysed to develop Report Card grades which are endorsed by our Independent Science Panel.



Overall snapshot – ecosystem health index results

The overall Ecosystem Health Index for the Fitzroy Basin waterways decreased from a low B (Good) in 2018-19 to a high C (Fair) in 2019-20. A fair grade this year indicates there was a mix of good and poor levels of water quality and biological health indicators.

The Fitzroy and Connors catchments grades decreased from a B to a C. The other ten reporting zones retained the same grade as the previous reporting period.

Catchment grades this year can be attributed in part to rainfall, which is again below average. Catchment condition and rainfall levels and intensity impact water quality. While erosion and run-off can negatively impact water quality, especially in flooding years, in times of below average rainfall, a lack of flushing can keep pollutants in-stream, also causing water quality issues. As in previous years, there continues to be a sparsity of ecology data in some catchments impacting some indicators.

Rainfall Map

The map shows annual rainfall across the Fitzroy basin for the 2019-2020 year. The annual rainfall ranged from close to average in the yellow areas to around 40 per cent of average annual rainfall in the dark orange areas.



Long-term trends

Over time, trends in grades offer a better understanding of the resilience of waterways and build a more comprehensive picture of the influence of drivers and pressures in each catchment. This graph presents the overall Fitzroy Basin grade over time and indicates that overall aquatic condition has remained fair to good since 2010-11. Each Fitzroy Basin Report Card helps us to build confidence in the long-term waterway health of the basin. 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 Basin 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.

JANGGA PEOPLE

WESTERN

KANGOULU

PFOPLE

WANGAN AND JAGALINGOU

(CLERMONT BELYANDO) PEOPLE

BIDJARA PEOPLE

WIDI PEOPLE

BARADA BARNA PEOPLE

BARADA,

KABALBARA.

PEOPLE

GAANGALU

NATION PEOPLE

WADJA PEOPLE

IMAN/JIMAN PEOPLE

all la

KANOLU

PEOPLE

BIDJARA PEOPLE-KARINGBAL PEOPLE Fitzroy Rive

WULLI WULLI NATION PEOPLE

We acknowledge the Barada Barna People, Widi People, Jangga People, Barada Kabalbara Yetimarala People, Gaangalu Nation People, Darumbal People, Woppaburra People, First Nations Bailai, Gurang , Gooreng Gooreng, Taribelang Bunda People, Wulli Wulli Nation People, Wadja People, Iman/Jiman People, Western Kangoulu 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 July 2021.

DARUMBAL PEOPLE WOPPABURRA PEOPLE

FIRST NATIONS BAILAI, GURANG, GOORENG GOORENG, TARIBELANG BUNDA PEOPLE

This map and the names of First Nations were derived from National Native Title Tribunal (NNTT) datasets accessed in June 2021. 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.

About Fitzroy Partnership for River Health

The Fitzroy Basin is the largest catchment draining to the east coast of Australia and to the Great Barrier Reef. It incorporates some of the nation's most productive and profitable resource, industry and agricultural producers, a vast and beautiful landscape with a growing regional population.

Fitzroy Partnership for River Health was launched in 2012, a collaboration between government, industry, research and community organisations, who all have an interest in the health of waterways across the Fitzroy Basin. With such a significant region of environmental assets and agricultural, industrial and community importance, providing an independent report on waterway health remains critical.

Fitzroy Partnership for River Health's role is threefold: to facilitate improved water quality monitoring, collate and assess data and publicly report on waterway health to the Fitzroy Basin community; to provide a platform for a unique collective working to address shared water challenges in the region; and to engage with the community to build awareness of the importance of waterway health through citizen science activities.

Dr Eva Abal – Independent Science Panel Chair

The community can be assured the Fitzroy Partnership annual report cards are independent, drawing together data obtained by partners from 244 sites. Over ten years we have refined the program design to ensure the report card data is carefully reviewed and follows best available science. On behalf of the Fitzroy Independent Science Panel members, I commend the Partnership for their leadership in driving the new Regional Receiving Environment Monitoring Program in the Fitzroy region which will enable a whole-of-system approach to monitoring the health of Fitzroy waterways. It will perform a critical role of filling data gaps that have occurred over

Join us

Does your organisation want to be part of our successful partnership? Partner benefits include community recognition and promotion, networking opportunities, access to up-to-date information and an Independent Science Panel. Join us and be part of regional Queensland's leading waterway report card network.

Celebrating 10 years of reporting

Fitzroy Partnership for River Health is undertaking a comprehensive review of its programs and will analyse 10 years of collected data to ensure we continue to contribute to the best outcomes for waterway health in the Central Queensland region.

We recognise our valued partners



some years.

For more information: Fitzroy Partnership for River Health

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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 – <u>www.riverhealth.org.au</u>.