

# 2023 Fitzroy Basin Report Card

for period July 2021  
to June 2022



New Fitzroy Basin-Wide Monitoring Program

**fitzroy**  
partnership  
for river health

Image: Fairbairn Dam, Emerald.

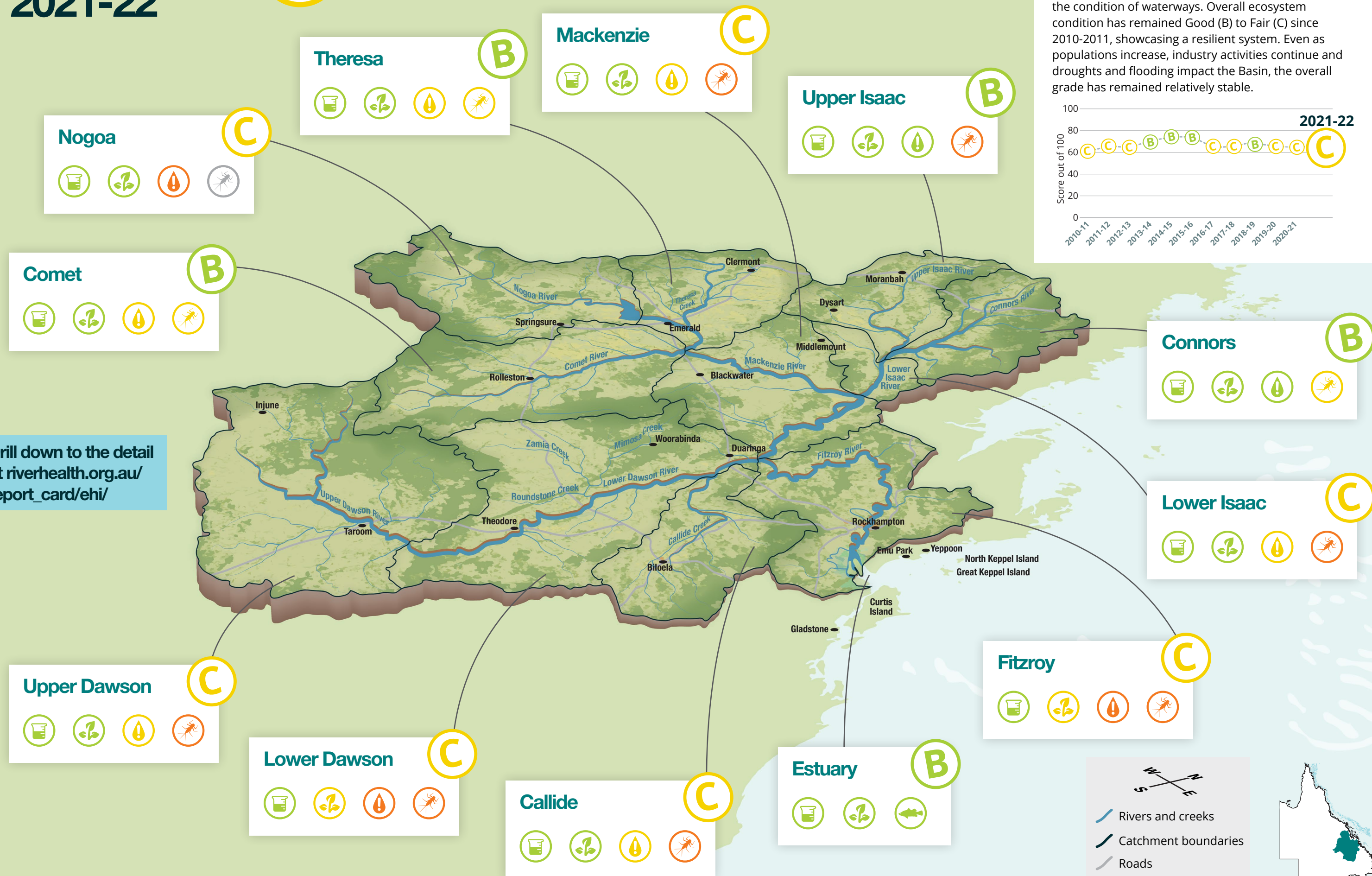
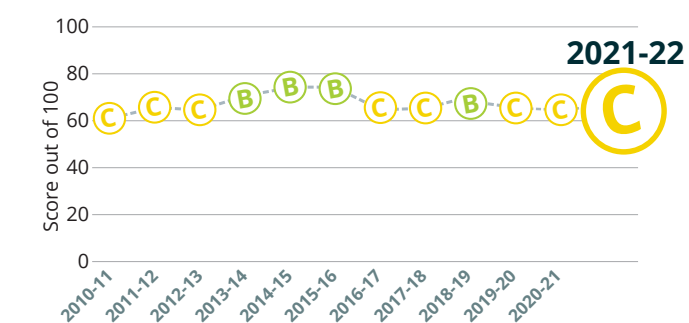


# Fitzroy Basin C

## 2021-22

### Fitzroy Basin trends

Over time, trends in scores offer an understanding of management changes and climate events that influence the condition of waterways. Overall ecosystem condition has remained Good (B) to Fair (C) since 2010-2011, showcasing a resilient system. Even as populations increase, industry activities continue and droughts and flooding impact the Basin, the overall grade has remained relatively stable.



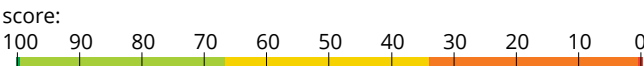


# How do I interpret the Report Card information?

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



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.



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



This year, as we move from one monitoring program to another, confidence and trends ratings have been removed to be cautious about assumptions between two different data sets.

## Key messages

### Overall result

The overall Ecosystem Health index for the Fitzroy Basin waterways remained a C (Fair) grade. During the past 12 years of reporting, the overall grade has remained relatively stable. It is at individual sites, where variations in nutrient, toxicant and ecological scores can be seen. These changes are dependent on factors such as land use, climate, hydrology, ground cover and geology.

### Good news for ecology

This year the Callide, Upper Dawson, Fitzroy and Lower Isaac results include ecological data for the first time. It is important to note this year's Report Card is a transition year using data from the new monitoring program for the first time, so it is difficult to make comparisons between catchments and grades. Overall, the community should be encouraged by the implementation of a stronger monitoring program which allows a more complete picture of river health.



### A record year of rainfall

Rainfall this year was higher than the years before, ranging from the lowest average of 656mm in the Upper Isaac in the west, to the highest average of 852mm in the Callide catchment in the east. November 2021 was Australia's wettest November since national records began in 1900. Rainfall and surface run-off impacts water quality in a variety of ways, for example increased erosion and sedimentation.

### Barramundi scores improve

Barramundi recruitment attained an A (Excellent). Barramundi recruitment is an important indicator of waterway health and the year provided great news for barramundi recruitment, primarily due to high wet season flow.



### Waterbugs

Macroinvertebrates (waterbugs) sampling improved this year with ecology being sampled at 10 of the 11 catchments. Waterbugs include freshwater shrimp, insect larvae like dragonflies and tiny crustaceans. The results indicate C (Fair) to D (Poor) results with mostly tolerant and resilient species present. Water quality can impact the variety and number of waterbugs in stream, which is why they are an important indicator of ecosystem health.



### Did you know?

The Mount Morgan Mine, located in the Callide catchment, used to be one of the world's most productive gold mines. It created strong economic returns but left a legacy of waterway issues. Mining legislation today has come a long way, ensuring environmental impacts from extractive industries are minimised. Read our Water Quality Fact Sheet, *Callide Catchment – Not all is Golden* on our website.



## A partnership for a more complete picture of Fitzroy Basin



Dr Eva Abal,  
Independent Science Panel Chair

Fitzroy Partnership for River Health was established in 2012 to assess water quality data and provide an independent Report Card on ecosystem health in the Fitzroy Basin for the community. The data is scrutinised by an independent panel of science experts to ensure the Report Card uses the best available

science for a more complete picture of river health.

## A new monitoring program begins

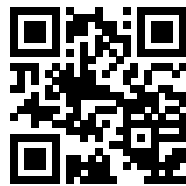
The Partnership came together in recent years to develop a new basin wide monitoring program. The new program improves the spread of data and is more representative of each catchment, also solving the problem of inadequate ecological data. Data from the new monitoring program has been used for the first time to produce this Fitzroy Basin Report Card.

## More timely information for the community

The new monitoring program means the Report Card can be produced much more quickly than in previous years. In 2023 there will be two Report Cards – one in April for 2021-22 and one in October, soon after sampling for 2022-23 is complete. In future, the Report Card will be produced annually around October.

## A decade of data for a more informed community

As one of the longest running waterway collectives in the world, the Partnership has produced over a decade of report cards, providing significant community value. It recently produced a 10-year data review to ensure the Partnership continues to provide best available science and an analysis of trends and changes in the Basin over time.



Find out more at  
[www.riverhealth.org.au](http://www.riverhealth.org.au)

## Community Survey

In late 2021, a community survey was undertaken to measure how the Fitzroy Basin community values our natural resources. With the support of the CSIRO as part of the Social and Economic Long-Term Monitoring Program (SELTMP) we obtained 467 survey responses.

The top 10 'First words' that came to mind when thinking about waterways in the region:

**Crocodiles** Rivers  
BROWN **Fitzroy River**  
**Fishing Water**  
**LARGE**  
Muddy DIRTY Flood

**Top 3** perceived very big problems for waterway health in the Fitzroy were



**Litter and debris**



**Weeds in and around waterways**



**Chemical pollutants**



**87%**

believed freshwater creeks and rivers were in 'Fair' to 'Good' health



**58%**

believed inshore coral reefs were in 'Fair' to 'Good' health

**54%**



of respondents said they participated in local clean up activities



**Mining activities**



**Climate change**



**Land-based run-off**

rated as the top extremely serious threats to waterways in the Fitzroy region

Learn more about the survey on our website





## First Nations in the Fitzroy

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 and the names of First Nations were derived from National Native Title Tribunal (NNTT) datasets accessed in June 2022. Source: [www.nntt.gov.au](http://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.

## We recognise our valued partners



### For more information: Fitzroy Partnership for River Health

- [riverhealth.org.au](http://riverhealth.org.au)
- [admin@riverhealth.org.au](mailto: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](http://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](http://www.riverhealth.org.au).