TZROY • COMET • NOGOA • MACKENZIE • ISAAC • DAWSON • C



Fitzroy Basin Report Card

JULY 2025 - JUNE 2026

fitzroy partnership for river health

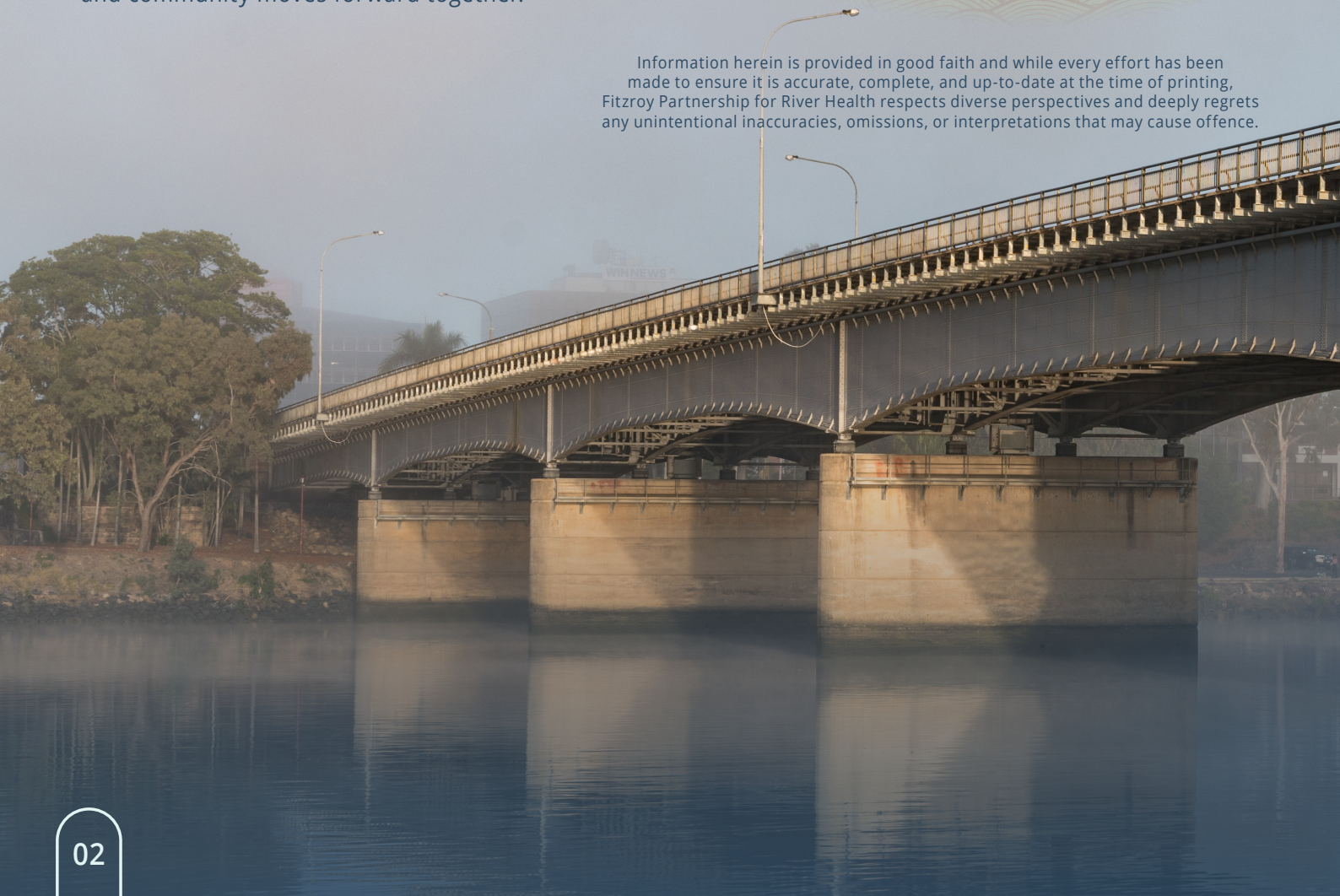
The first stewards

The First Nations people have cared for this continent for over 65,000 years and we pay our respects to them, their cultures and Elders past and present. We acknowledge the Barada Barna, Widi, Jangga, Barada Kabalbara Yetimarala, Gaangalu Nation People, Darumbal, Koinjmal, Woppaburra, First Nations Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda People, Wulli Wulli Nation People, Wadja, Iman/Jiman, Western Kangoulu, Kanolu, Bidjara, Karingbal, Wangan and Jagalingou People as the First Nations peoples of the waters, and lands, within our reporting region.

We look forward to continuing to engage with these first stewards and their contacts and representatives to understand their care for country, their connection to waterways and to ensure their values and priorities are considered as industry, government, environment and community moves forward together.



Information herein is provided in good faith and while every effort has been made to ensure it is accurate, complete, and up-to-date at the time of printing, Fitzroy Partnership for River Health respects diverse perspectives and deeply regrets any unintentional inaccuracies, omissions, or interpretations that may cause offence.



ABOUT THE

FITZROY PARTNERSHIP FOR RIVER HEALTH and our waterways

The Fitzroy Partnership for River Health (FPRH) brings together government, industry, research and community partners who share one goal: the long-term health of waterways across the Fitzroy Basin.

At more than 142,600 km², the Fitzroy Basin is the second-largest seaward-draining basin in Australia and the largest draining into the World Heritage-listed Great Barrier Reef. With more than 20,000 kilometres of waterways it spans six major river systems: the Fitzroy, Dawson, Mackenzie, Nogoa, Comet and Isaac–Connors. The basin is rich in natural assets and of major economic importance to the region.

Since forming in 2012, FPRH has collated and assessed water quality data collected by organisations across the basin. We use it to produce annual report cards on waterway health, grounded in the best available science.

These give the community an independent, year-on-year picture of how our rivers and creeks are faring.

Beyond reporting, FPRH works directly with the community through initiatives such as Fitzroy WaterWatch. These programs encourage citizen science and highlight the connection between healthy rivers and a thriving regional economy.



A message from

ASSOCIATE PROFESSOR EVA ABAL

CHAIR OF THE INDEPENDENT SCIENCE PANEL

The Independent Science Panel plays an important role in ensuring the Fitzroy Partnership for River Health's reporting is grounded in credible, impartial and up-to-date science. Panel members bring expertise in freshwater ecology, hydrology, environmental chemistry and catchment management. Through rigorous review and constructive advice, the Panel helps keep the Fitzroy Basin Report Card robust, transparent and trusted.

I would especially like to acknowledge our Panel members, many of whom have generously shared their knowledge and scientific advice with the Partnership since its establishment in 2012. Their dedication and collective expertise have been invaluable in maintaining the integrity of the Report Card.



How do I interpret the Report Card information?

1 Various measures of water quality and biological health are assessed in the Report Card.

Phys-Chem Nutrients Toxicants Ecology

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.

score:

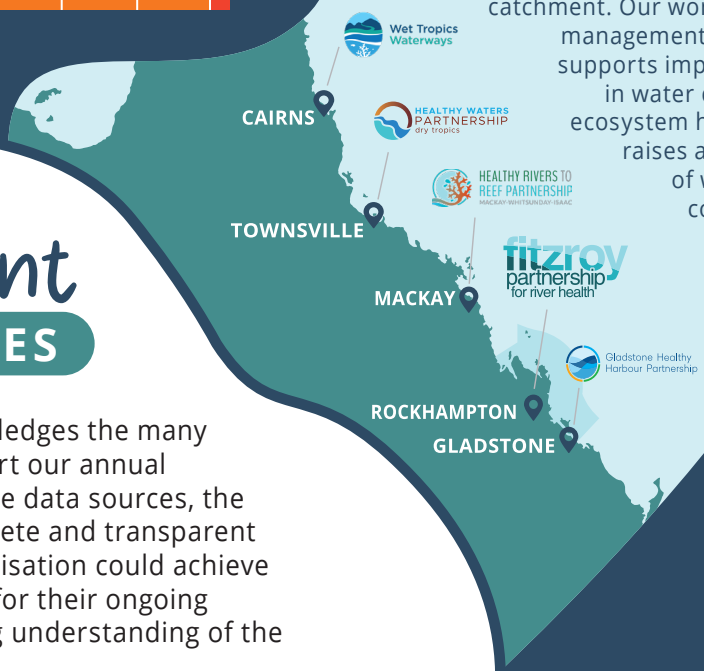
100 90 80 70 60 50 40 30 20 10 0

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

A B C D E

Did you know?

FPRH is one of five regional report card partnerships across the Great Barrier Reef catchment. Our work informs management decisions, supports improvements in water quality and ecosystem health, and raises awareness of waterway condition.



Acknowledgement

DATA SOURCES

Fitzroy Partnership for River Health acknowledges the many organisations that contribute data to support our annual reporting. By bringing together these diverse data sources, the Partnership is able to provide a more complete and transparent picture of river health than any single organisation could achieve alone. We sincerely thank all data partners for their ongoing collaboration and commitment to improving understanding of the Fitzroy Basin's waterways.

Queensland Government · Gladstone Ports Corporation (Growth, prosperity, community.) · FRREMP · infofish AUSTRALIA

(FRREMP: Fitzroy Regional Receiving Environment Monitoring Program)



Want to know more?

DIVE INTO THE DATA

Explore
GRAPHS AND TRENDS

GRADING METHODS
explained
A B C

Report Card highlights

The Fitzroy Basin Ecosystem Health index provides a snapshot of waterway health for the reporting year, summarising how our rivers and creeks are responding to the combined effects of climate, water flow, natural processes and human activities. The results reflect the dynamic nature of our environment and the way changing rainfall and flow conditions can influence water quality and aquatic ecosystems across the Basin.

Overall, waterway health across the Fitzroy Basin remained relatively stable in 2026, although results varied between sub-basins and indicators. Rainfall was variable across the Basin. The Upper Dawson received 508 mm, below its 16-year average of 607 mm, while the Lower Dawson received 723 mm, above its average of 668 mm. Despite these differences, the highest river level recorded in every freshwater sub-basin was higher than the previous year. With the Fitzroy River in Rockhampton reaching minor flood levels of 7.3m in January 2026.

Water quality was monitored six times between September 2025 and June 2026, providing information across both wet and dry seasonal conditions. Water quality remained generally Good, particularly for physical and chemical indicators, although turbidity and nutrient results varied across the Basin. Nutrient and toxicant condition improved in the Upper Dawson, while turbidity declined in the Nogoa and nutrient condition declined in the Fitzroy sub-basin. Toxicant condition improved in several sub-basins, including the Upper Isaac, where aluminium and copper results improved.

Ecological monitoring was undertaken after the wet season, between April and June 2026, when waterways were responding to the flow events experienced earlier in the year. The ecological results were variable across the basin. Macroinvertebrate condition made the biggest improvement with scores increasing in eight sub-basins and the grade improving from D to C in the Mackenzie, Fitzroy, Lower Dawson and Comet. Fish condition was variable, improving in the Callide and Upper Dawson but declining in the Fitzroy sub-basin.

The Fitzroy Estuary stood out for a strong improvement in Barramundi recruitment. This indicator varies considerably from year to year and is strongly influenced by flows in the Fitzroy River. The minor flood and high flows between January and March provided favourable conditions for the survival of juvenile Barramundi at the estuary monitoring site. Current ecological monitoring in the Fitzroy Estuary only includes Barramundi recruitment and chlorophyll-a. Other important indicators of estuary health, such as mangrove condition and mud crab populations, have not been measured as part of the Report Card monitoring program.

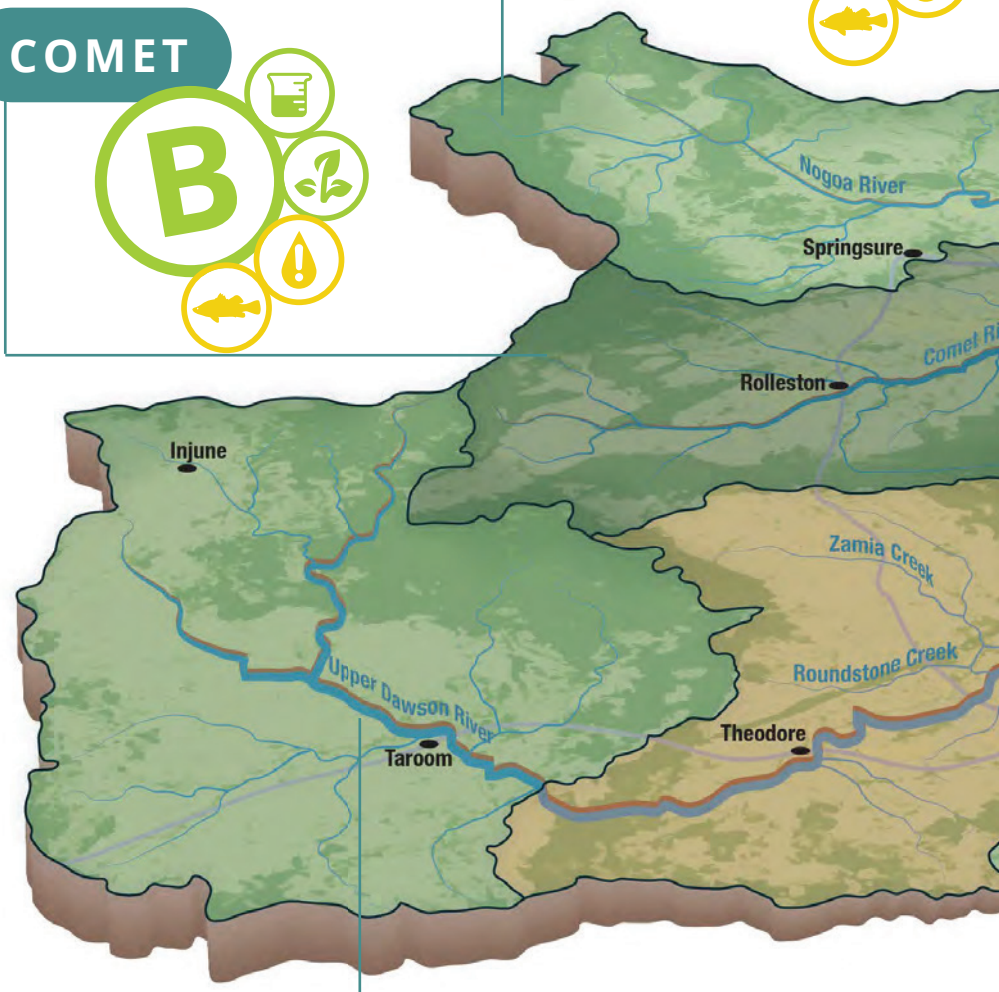
Continued monitoring and improvements to the Report Card will help us better understand how the Fitzroy Basin responds to changing climate and flow conditions, while ensuring our reporting reflects the latest science and the priorities of our communities and Partners.

CATCHMENT GRADES
2025-2026
at a glance

NOGOA C

B

COMET B



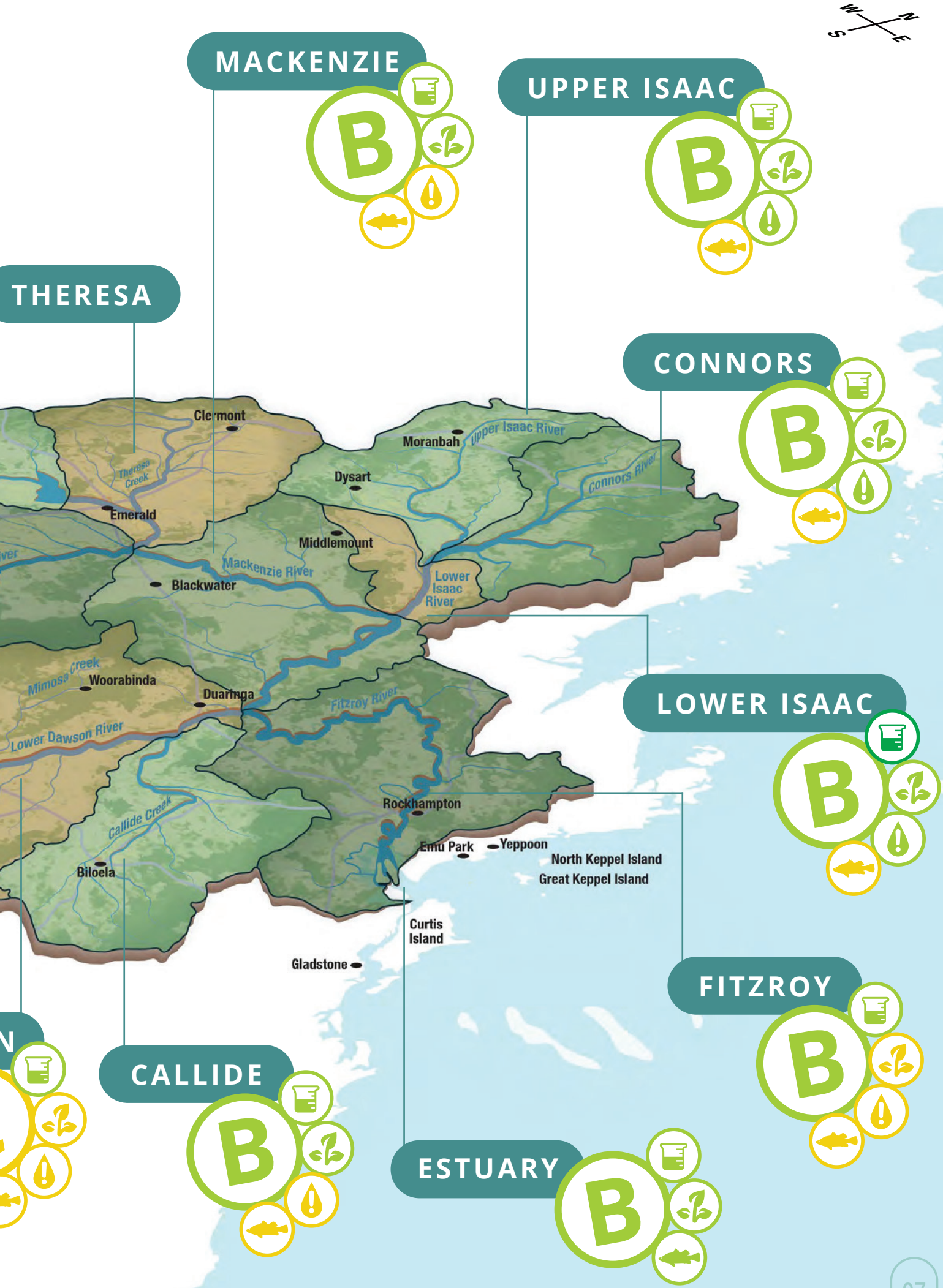
UPPER DAWSON B

LOWER DAWSO C

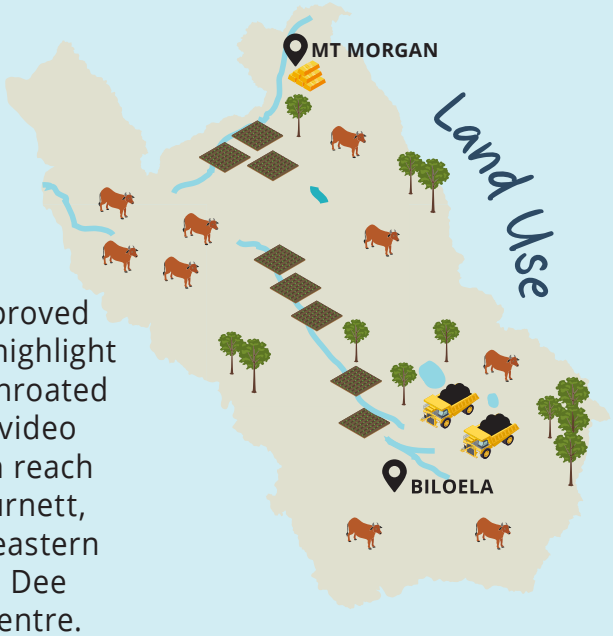
- A Excellent
- B Good
- C Fair
- D Poor
- E Fail

- Phys-Chem
- Nutrients
- Toxicants
- Ecology

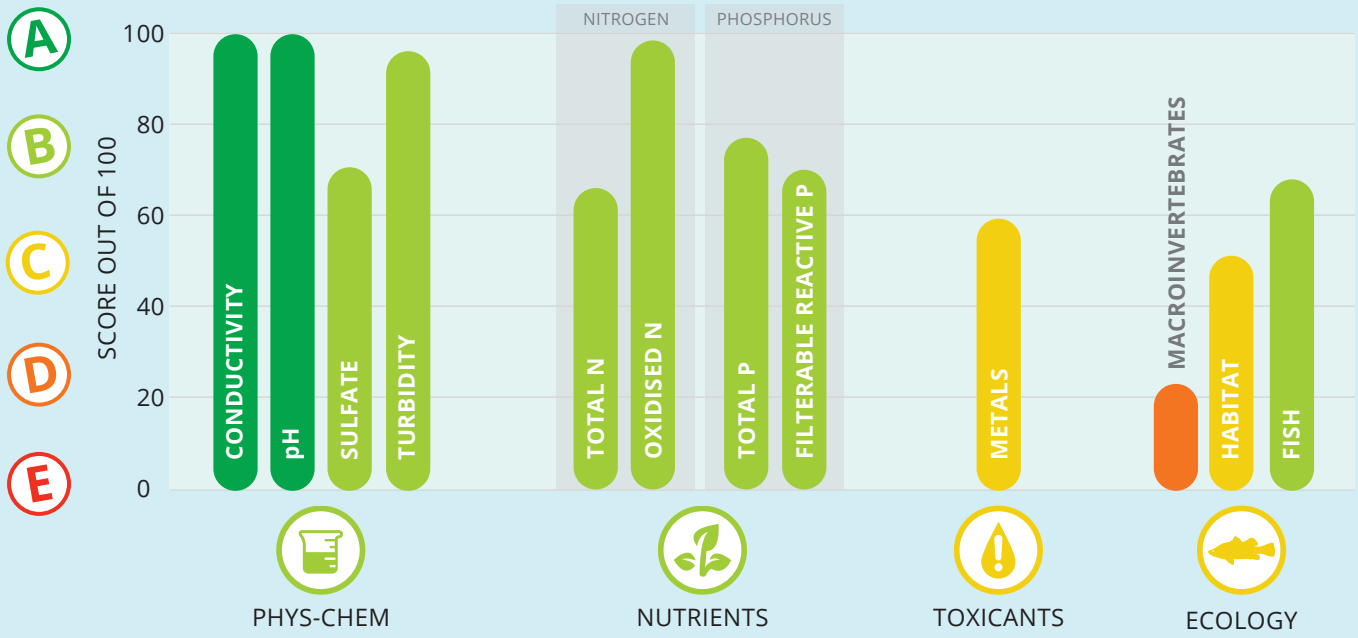
- Rivers and creeks
- Catchment boundaries
- Roads


MACKENZIE
B
UPPER ISAAC
B
THERESA
CONNORS
B
Clermont
Theresa Creek
Emerald
Moranbah
Upper Isaac River
Dysart
Connors River
Middlemount
Mackenzie River
Blackwater
Lower Isaac River
Mimosa Creek
Woorabinda
Duaringa
Fitzroy River
Lower Dawson River
LOWER ISAAC
B
Rockhampton
Callide Creek
Emu Park
Yeppoon
North Keppel Island
Great Keppel Island
Biloela
Curtis Island
Gladstone
FITZROY
B
CALLIDE
B
ESTUARY
B

CALLIDE Catchment B



Every ecological indicator in the Callide catchment improved in 2025–26, with freshwater fish lifting from C to B. A highlight was the detection of the critically endangered White-throated Snapping Turtle *Elseya albagula* on baited underwater video during fish sampling in June 2026. This large turtle can reach a carapace length of 45 cm and is found only in the Burnett, Mary and Fitzroy river systems. Located in the south-eastern corner of the Fitzroy Basin, the catchment takes in the Dee River, Don River and Callide Creek, with Biloela at its centre. From Biloela, water flows north across a fertile floodplain to join the Dawson River just downstream of Baralaba. Rainfall ranges from over 1000 mm a year in the eastern ranges, including Kroombit Tops, to around 600 mm in the west.



Spotted!

A highlight was the detection of the critically endangered White-throated Snapping Turtle *Elseya albagula* on baited underwater video during fish sampling in June 2026. This large turtle can reach a carapace length of 45 cm and is found only in the Burnett, Mary and Fitzroy river systems.



Credit: Craig Latta turtles.net.au

Highest River Level 7.8 m ↑

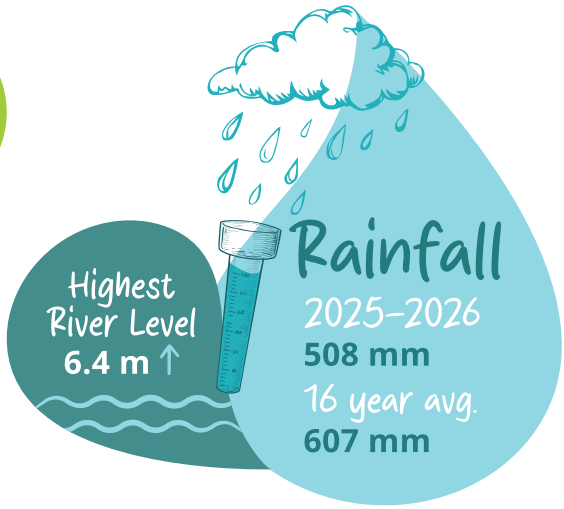
Rainfall 2025–2026

747 mm

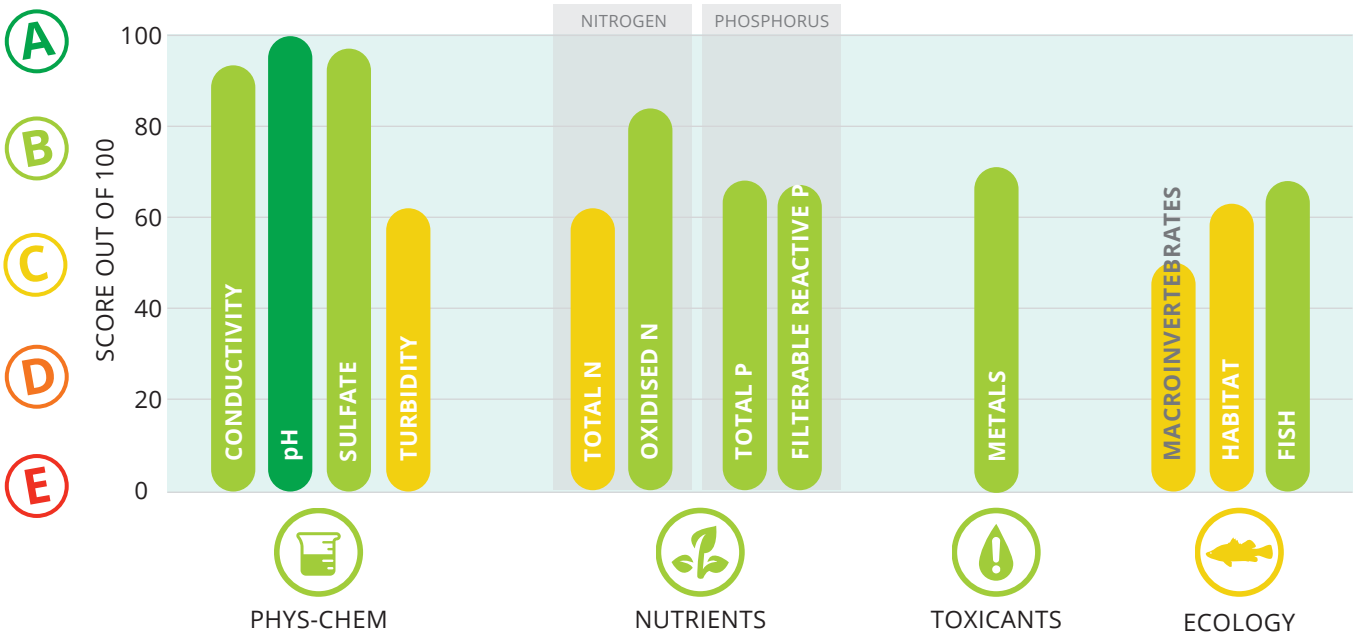
16 year avg. 729 mm

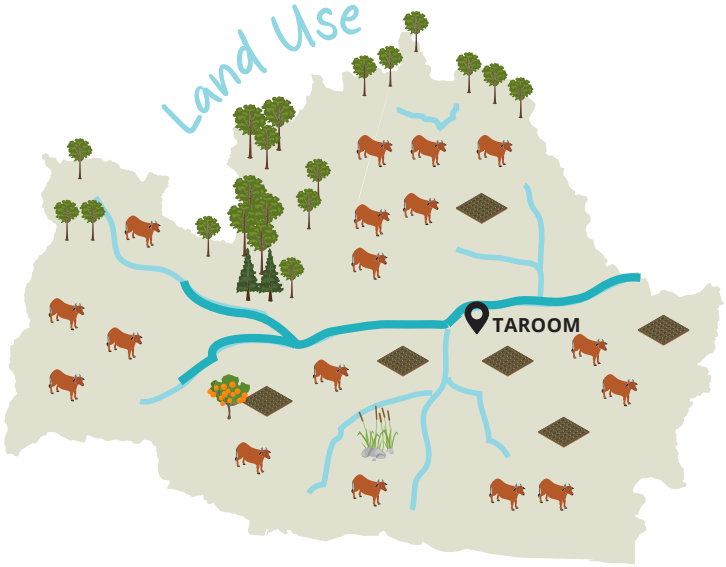
UPPER DAWSON Catchment

B



Toxicant condition in the Upper Dawson catchment improved from C to B in 2025–26, a result of lower copper concentrations. This was the best copper result since 2021–22. Freshwater fish also improved from C to B, and fish surveys recorded the Leathery Grunter *Scortum hillii,* a fish found only in the Fitzroy Basin. Located in the southern part of the Basin, the catchment carries the Dawson River eastward from Injune through Taroom, where several major creeks from the east join the river, before it enters the Lower Dawson catchment. Rainfall averages are higher in the east and fall in the south-west.





Toxicants

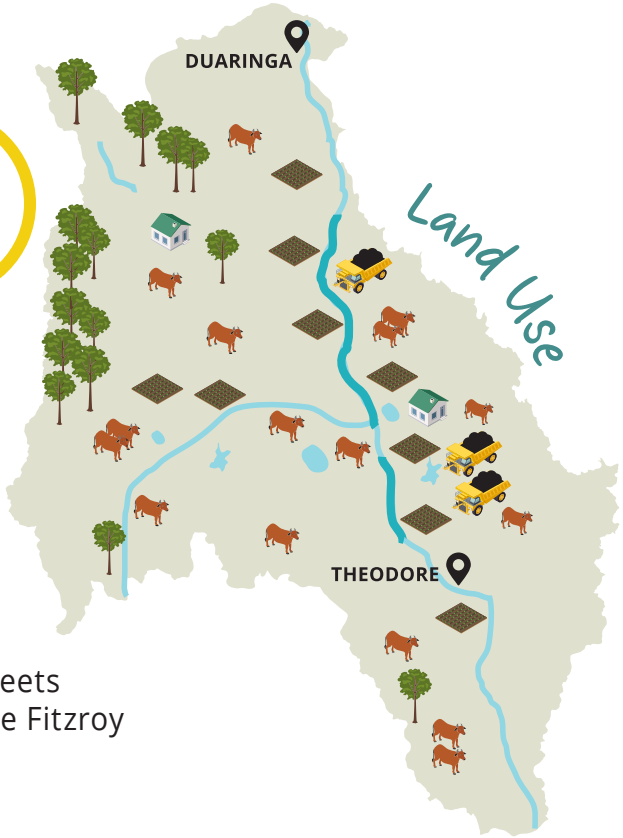
Toxicant condition in the Upper Dawson catchment improved from C to B in 2025–26, a result of lower copper concentrations. This was the best copper result since 2021–22.

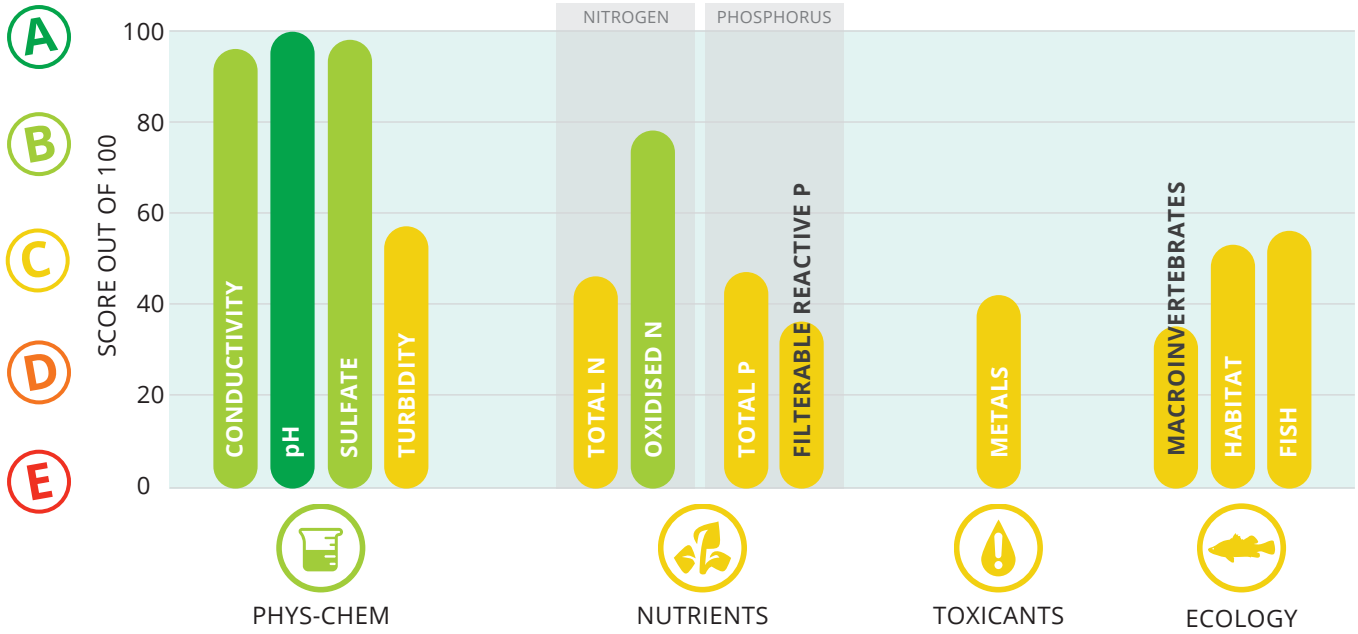
29
Cu
Copper

LOWER DAWSON Catchment

C

Fish surveys in the Lower Dawson catchment in 2025–26 recorded the Leathery Grunter *Scortum hillii.* This species is endemic to the Fitzroy Basin and is usually found in the Dawson and Fitzroy rivers, making the Lower Dawson an important area for its conservation. The catchment begins at Glebe Weir, just upstream of Isla Gorge, and the Dawson River winds through the valley past Theodore, Moura and Baralaba. The Dawson Range runs north–south through the catchment, dividing it in two. The river meets the Mackenzie River north-east of Duaringa, where the Fitzroy catchment begins.



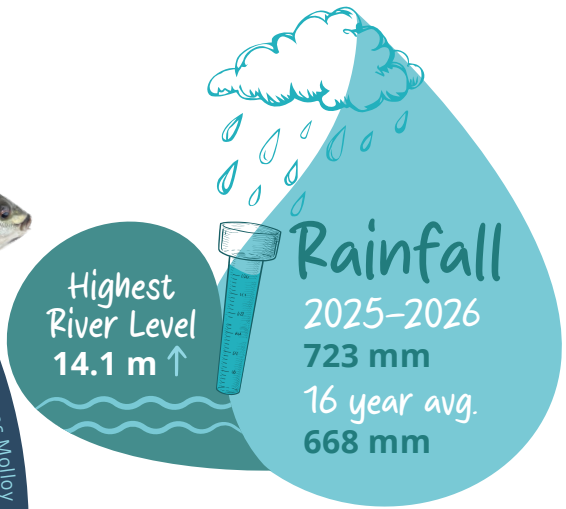


Spotted!

Fish surveys in the Lower Dawson catchment in 2025–26 recorded the Leathery Grunter *Scortum hillii.* This species is endemic to the Fitzroy Basin and is usually found in the Dawson and Fitzroy rivers, making the Lower Dawson an important area for its conservation.

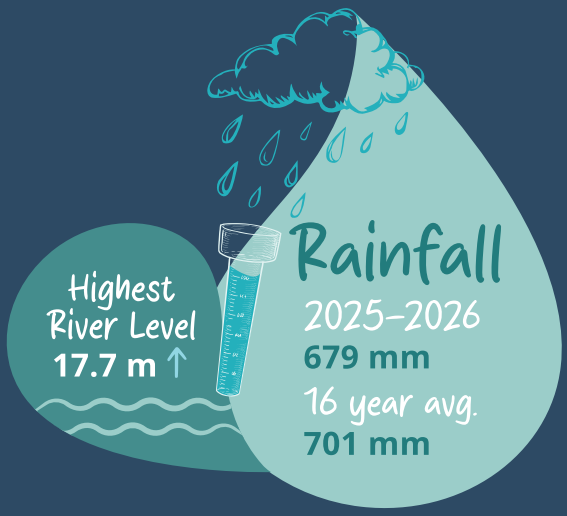


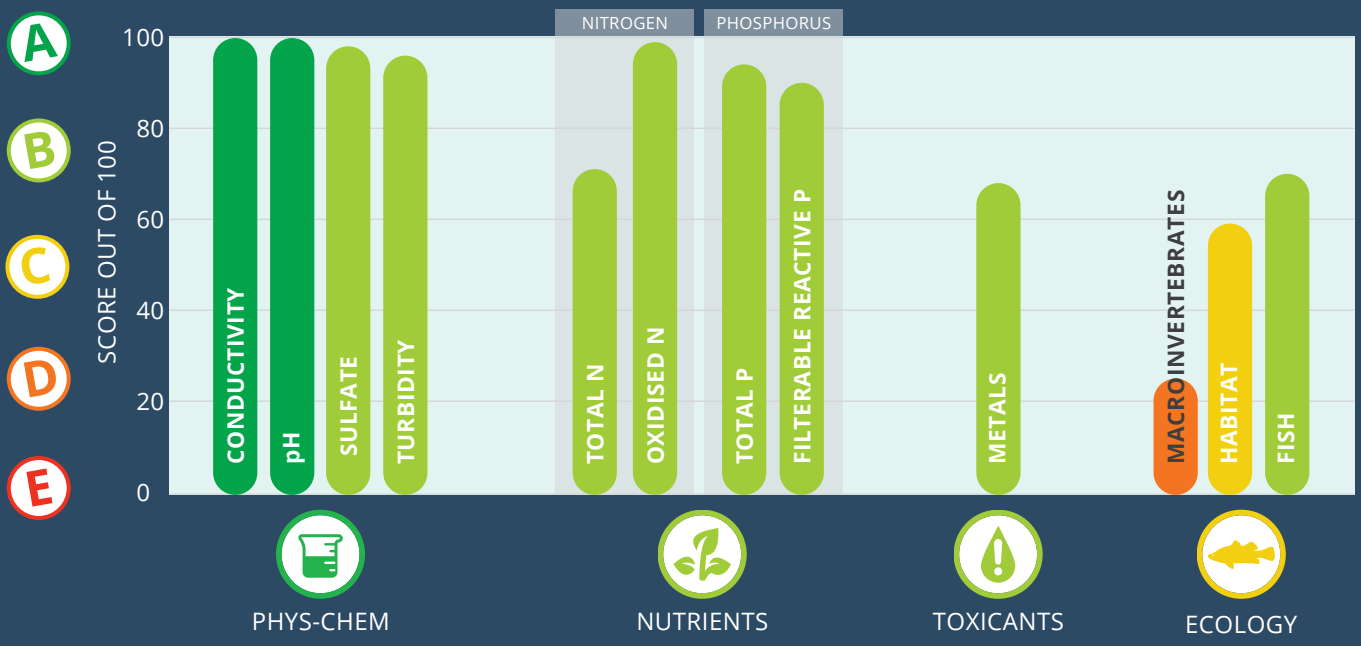
Credit: Thomas Molloy



LOWER ISAAC Catchment B

Water quality in the Lower Isaac catchment improved in 2025–26, particularly for physical and chemical indicators, nutrients and toxicants, while ecological condition remained relatively stable. The toxicant grade improved from C to B as Aluminium concentrations fell, continuing a gradual improvement in Aluminium scores over the past five years. The catchment begins in the north of the Fitzroy Basin, where the Connors River joins the Isaac River. From there, the heavily braided Isaac flows south-east, fed from both sides by creeks including Clarke and Rolf creeks. Rainfall is highest in the eastern ranges but drops sharply in the west.





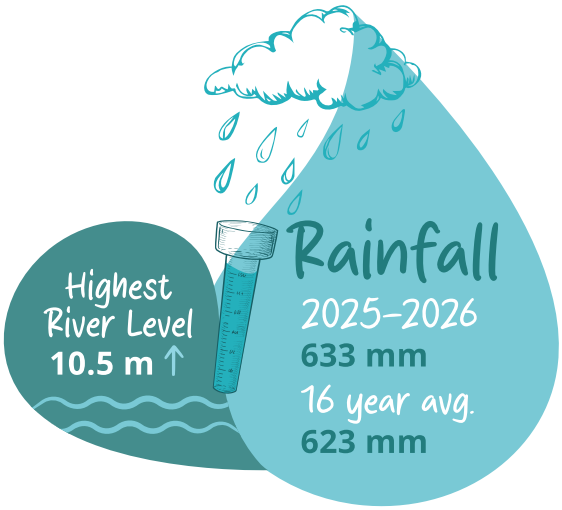


13
Al
Aluminium

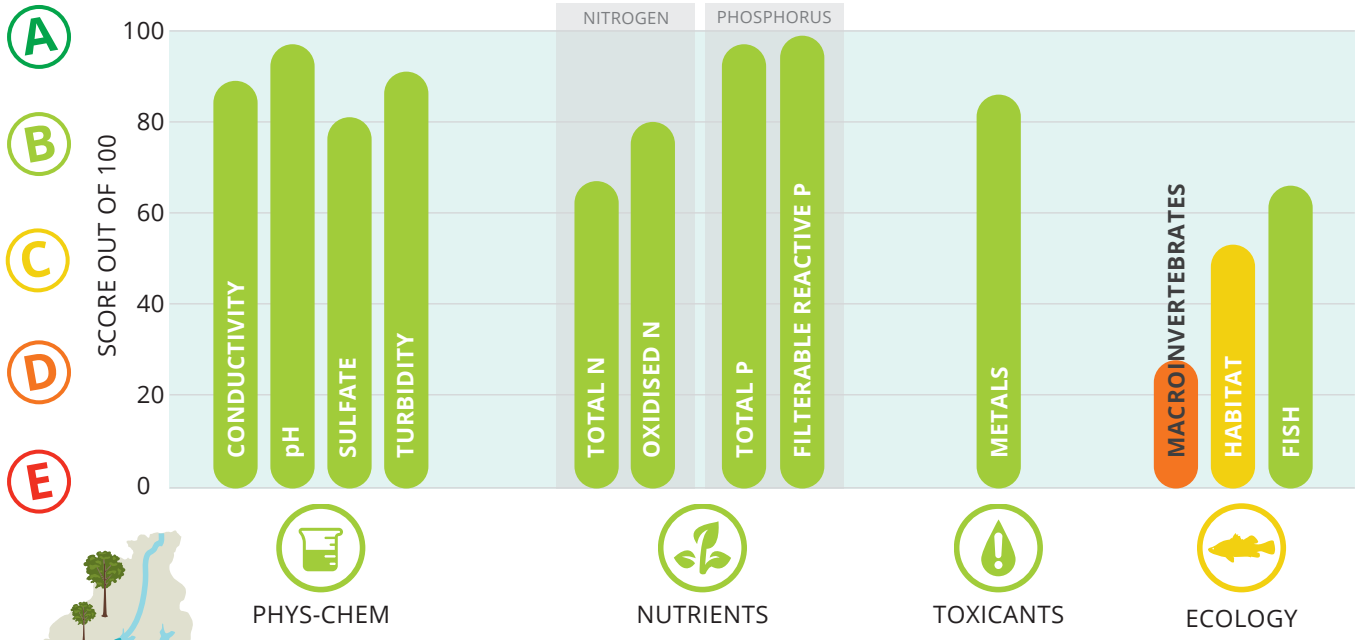
Toxicants

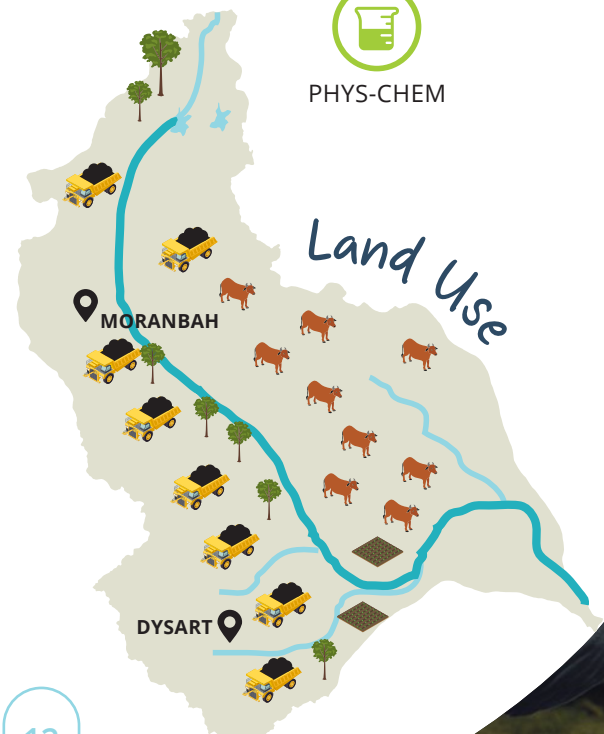
The toxicant grade improved from C to B as Aluminium concentrations fell, continuing a gradual improvement in Aluminium scores over the past five years.

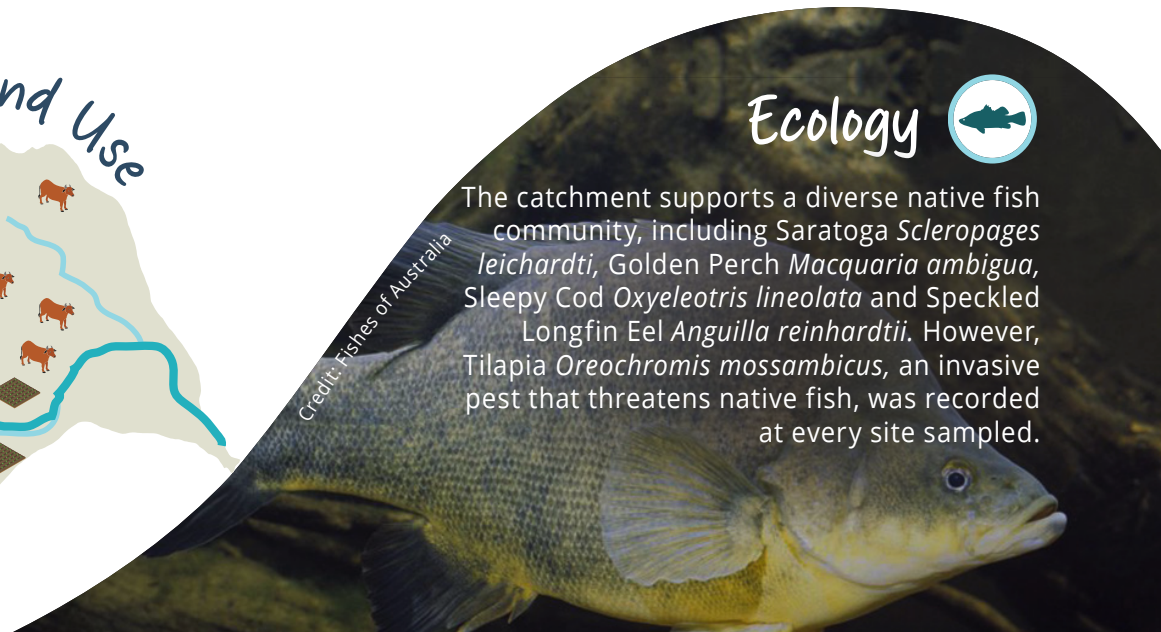
UPPER ISAAC Catchment B



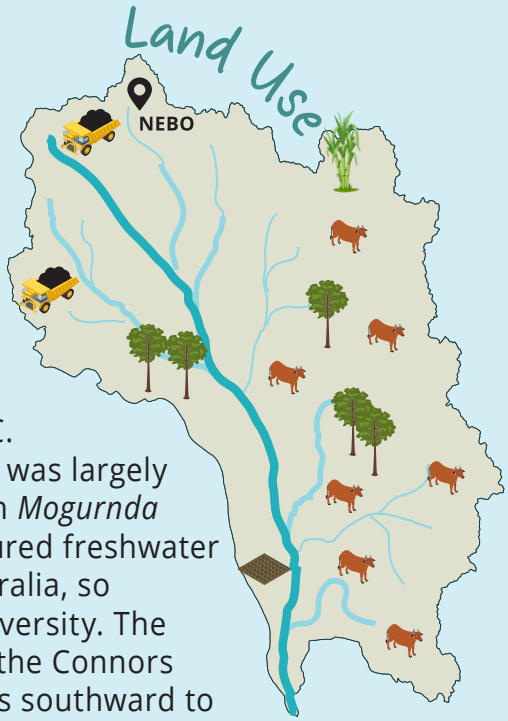
Toxicants were the standout improvement in the Upper Isaac catchment in 2025–26, with the grade rising from C to B as Aluminium and Copper concentrations fell. Copper scores have improved each year since 2023–24. Ecological condition eased slightly but remained C, with macroinvertebrate, fish and habitat scores similar to the previous year. The catchment supports a diverse native fish community, including Saratoga *Scleropages leichardti,* Golden Perch *Macquaria ambigua,* Sleepy Cod *Oxyeleotris lineolata* and Speckled Longfin Eel *Anguilla reinhardtii.* However, Tilapia *Oreochromis mossambicus*, an invasive pest that threatens native fish, was recorded at every site sampled. Located in the north-west of the Fitzroy Basin, the catchment carries the Isaac River south past Burton Dam and east of Moranbah. Creeks including Stephens Creek near Dysart feed the river until it meets the Connors River. Rainfall is below 600 mm a year across most of the catchment but exceeds 1000 mm in the north-eastern ranges.



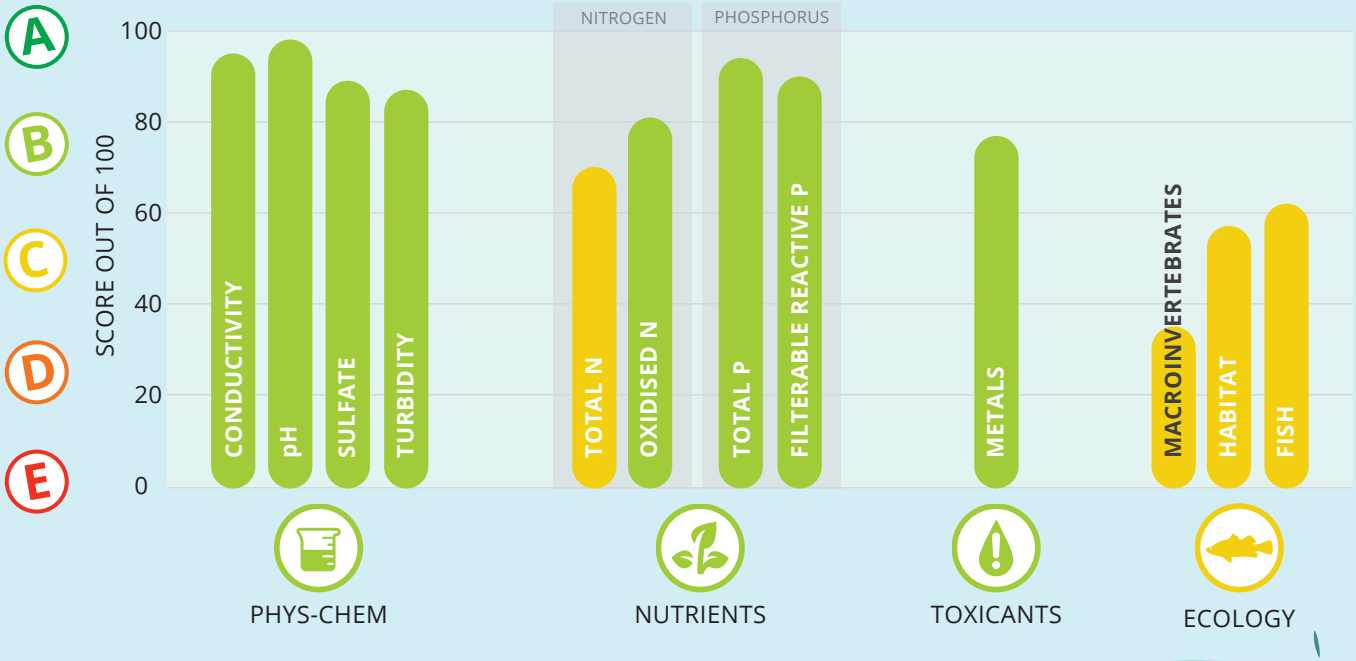


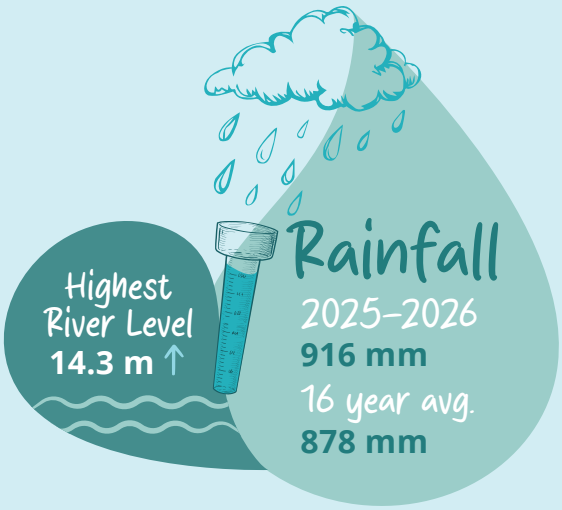


CONNORS Catchment B



Water quality in the Connors catchment remained generally stable in 2025–26, but ecological condition weakened. Macroinvertebrates showed the largest decline but remained C. Habitat results were also lower, although fish condition overall was largely unchanged. Fish surveys recorded the Purple-spotted Gudgeon *Mogurnda adspersa,* a colourful native predator that relies on well-structured freshwater habitat. The species has declined substantially in parts of Australia, so its presence here is a positive sign for the Basin's native fish diversity. The catchment lies in the north-east of the Fitzroy Basin, between the Connors Range and the Upper Isaac catchment. The Connors River flows southward to join the Isaac just south of Pink Lagoon. The catchment's eastern ranges receive over 1000 mm of rain a year, and the catchment contributes around half of the Basin's average flow.



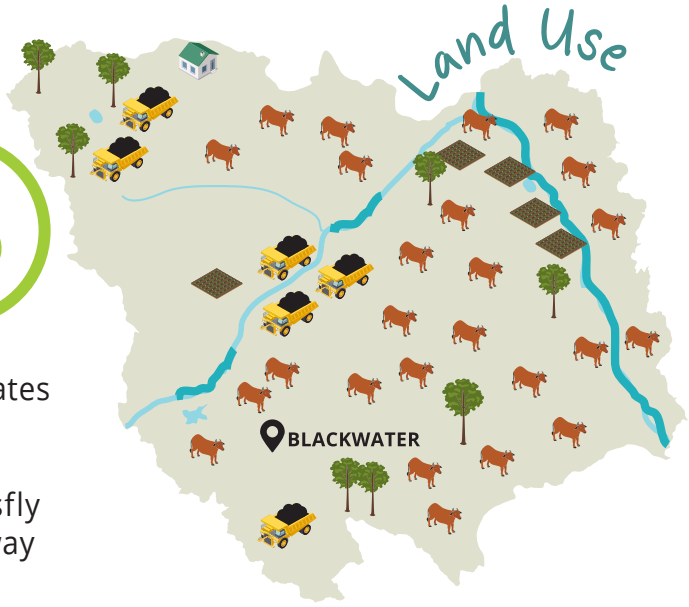


Spotted!

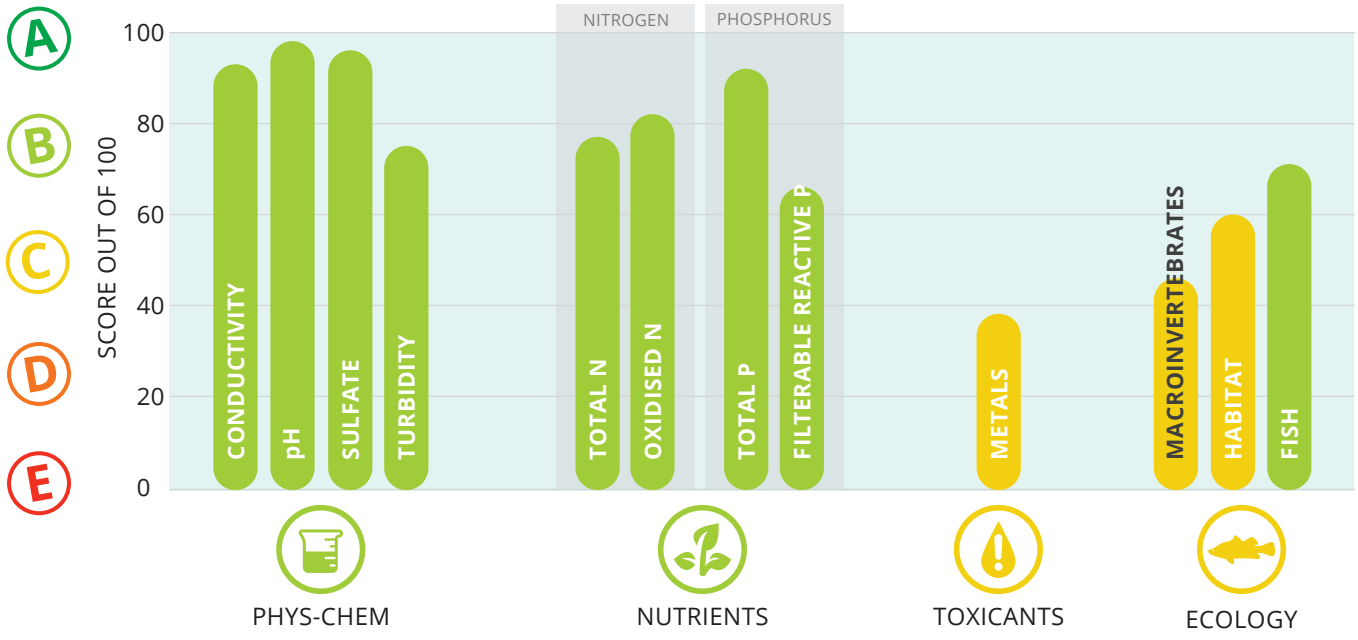
Fish surveys recorded the Purple-spotted Gudgeon *Mogurnda adspersa*, a colourful native predator that relies on well-structured freshwater habitat. The species has declined substantially in parts of Australia, so its presence here is a positive sign for the Basin's native fish diversity.


Credit: Fishes of Australia

MACKENZIE Catchment B



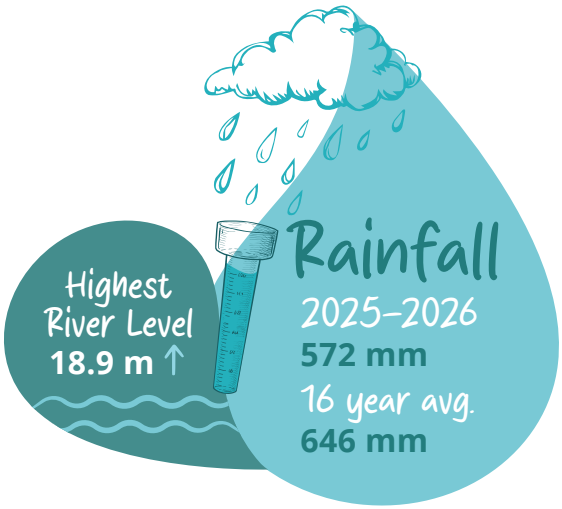
All three ecological indicators in the Mackenzie catchment improved in 2025–26. Macroinvertebrates showed the strongest gain, rising from D to C. Samples contained a diverse macroinvertebrate community, including mayflies and several caddisfly families, which are associated with better waterway condition. At the heart of the Fitzroy Basin, the catchment begins at the junction of the Comet and Nogoa rivers. The Mackenzie River flows past several major creeks, including Blackwater Creek and joins the Isaac River, then flows south-east to meet the Dawson River and form the Fitzroy. Rainfall exceeds 1000 mm a year in the north-eastern ranges but falls quickly to about 500 mm in the west.



Ecology

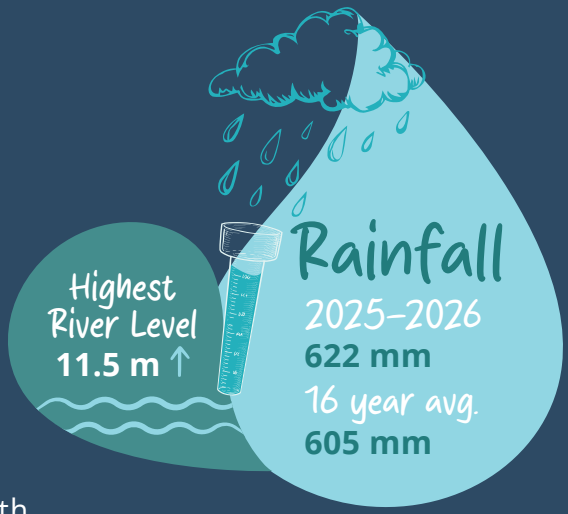
Samples contained a diverse macroinvertebrate community, including mayflies and several caddisfly families, which are associated with better waterway condition.

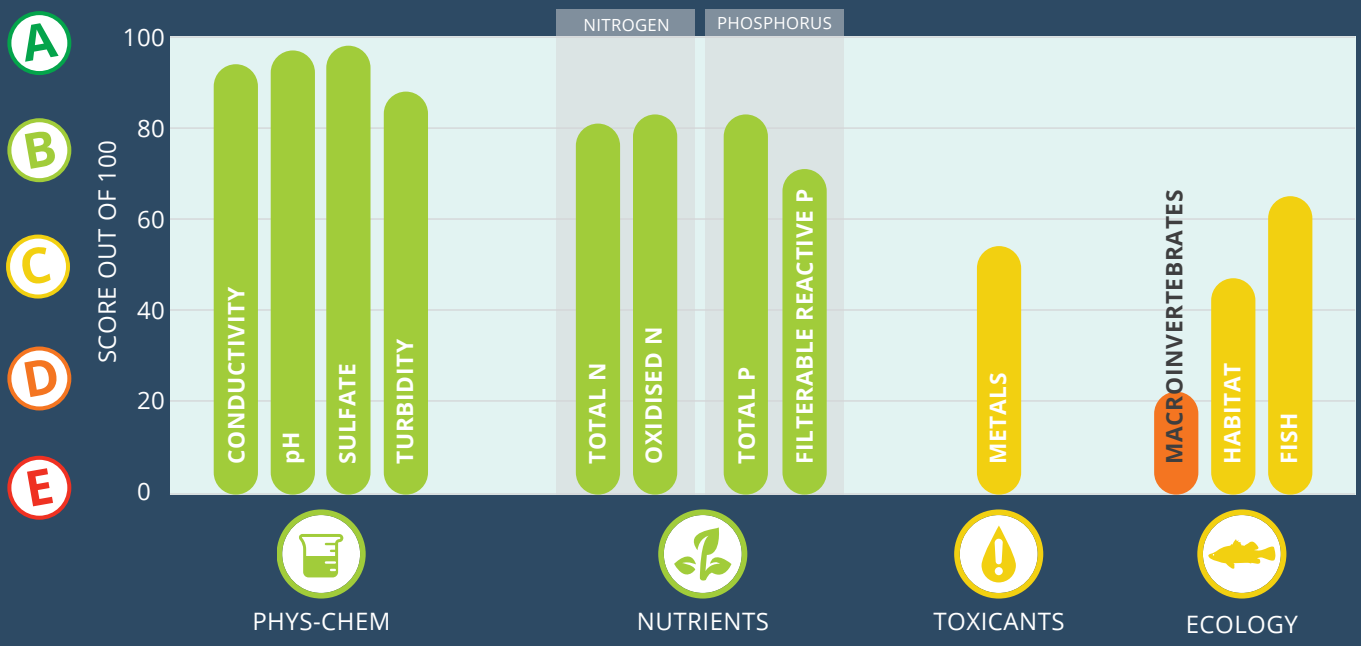
Credit: National Waterbug Blitz



THERESA Catchment B

Overall condition in the Theresa catchment was relatively stable in 2025–26. Nutrients and toxicants improved, physical and chemical condition remained good, and ecological condition was unchanged. The nutrient grade held B, although the score increased, with improvements across all four nutrient indicators. The fish community was dominated by native species, including a high abundance of Eastern Rainbowfish *Melanotaenia splendida splendida,* which are commonly associated with healthy freshwater habitats. Introduced fish were present only in low numbers, with Gambusia *Gambusia holbrooki* and a single Tilapia *Oreochromis mossambicus* recorded. Located in the west-north-west of the Fitzroy Basin, Theresa Creek flows south-east to join the Nogoa River. The catchment also includes the section of the Nogoa downstream of Fairbairn Dam. Rainfall is highly variable and generally low.









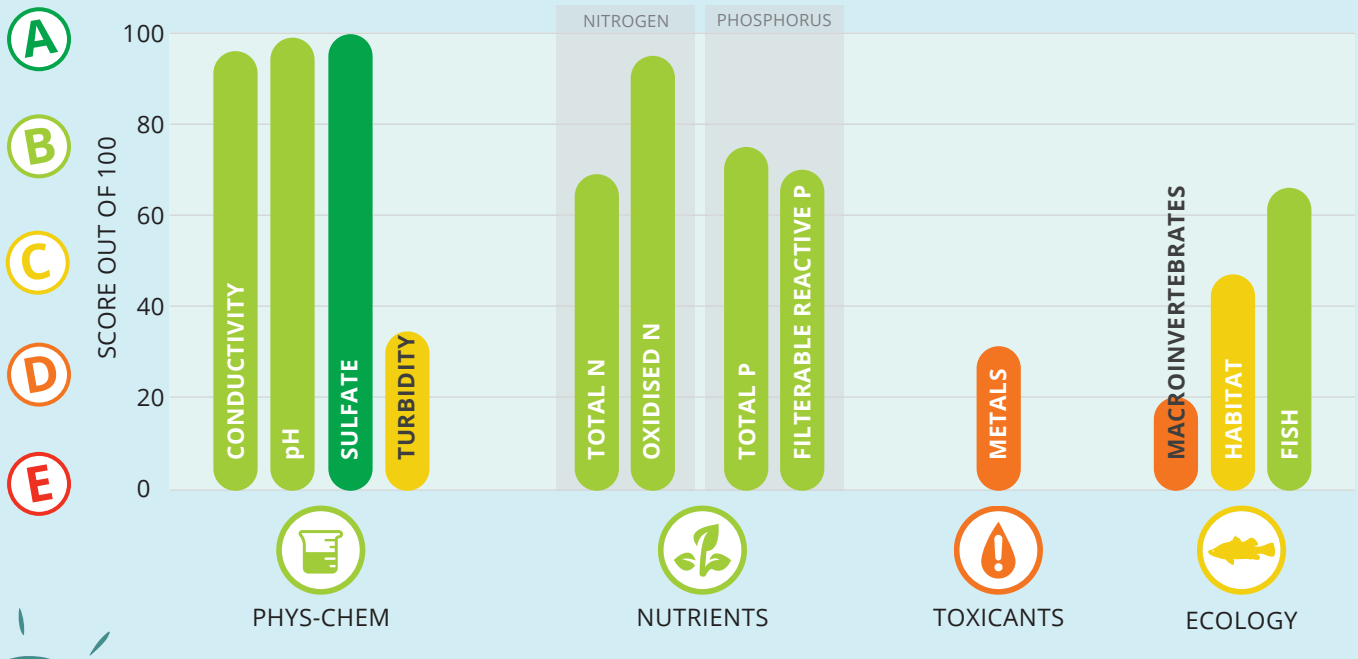
Spotted!

The fish community was dominated by native species, including a high abundance of Eastern Rainbowfish *Melanotaenia splendida splendida,* which are commonly associated with healthy freshwater habitats. Introduced fish were present only in low numbers, with Gambusia *Gambusia holbrooki* and a single Tilapia *Oreochromis mossambicus* recorded.

NOGOA Catchment C

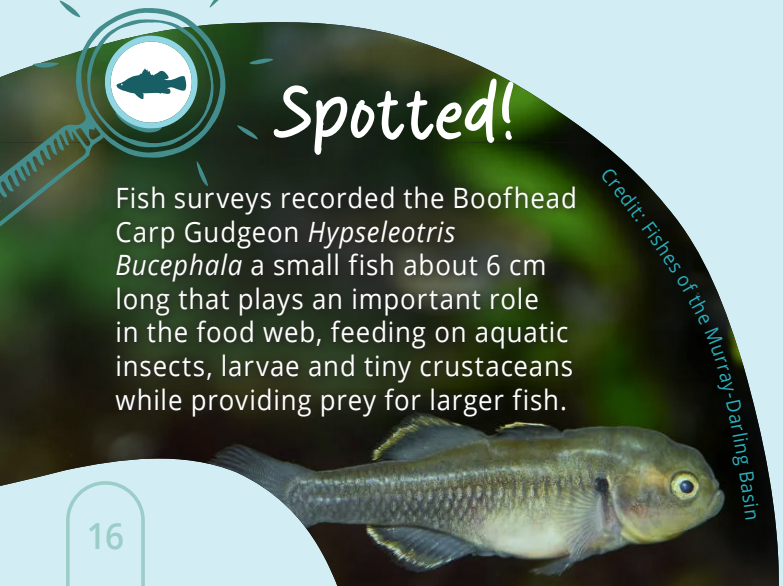


Overall condition in the Nogoa catchment was relatively stable in 2025–26. Aluminium and phosphorus improved, as did ecological condition. Turbidity was the key parameter that declined. Fish surveys recorded the Boofhead Carp Gudgeon *Hypseleotris Bucephala* a small fish about 6 cm long that plays an important role in the food web, feeding on aquatic insects, larvae and tiny crustaceans while providing prey for larger fish. Bordered by the Buckland Ranges to the south and the Drummond Ranges to the west, this fan-shaped catchment in the west of the Fitzroy Basin drains north-east through Medway, Vandyke, Borilla and Buckland creeks into Fairbairn Dam. The dam supplies water to a significant area of irrigated agriculture downstream in the Theresa catchment.



Spotted!

Fish surveys recorded the Boofhead Carp Gudgeon *Hypseleotris Bucephala* a small fish about 6 cm long that plays an important role in the food web, feeding on aquatic insects, larvae and tiny crustaceans while providing prey for larger fish.



Credit: Fishes of the Murray-Darling Basin

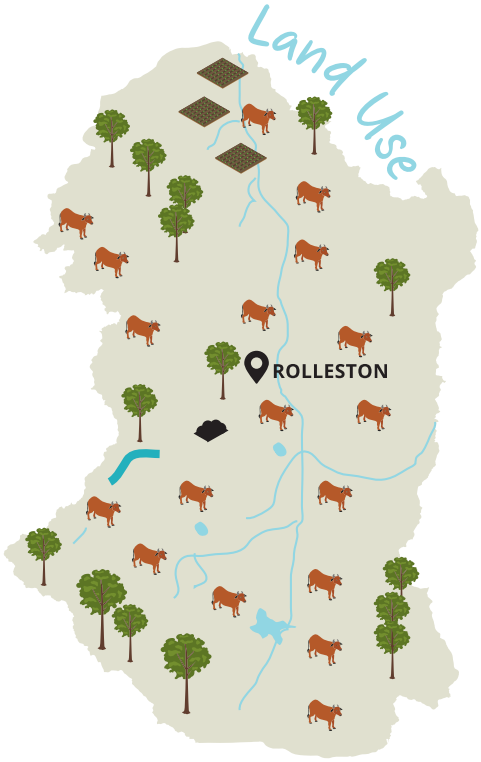
Rainfall

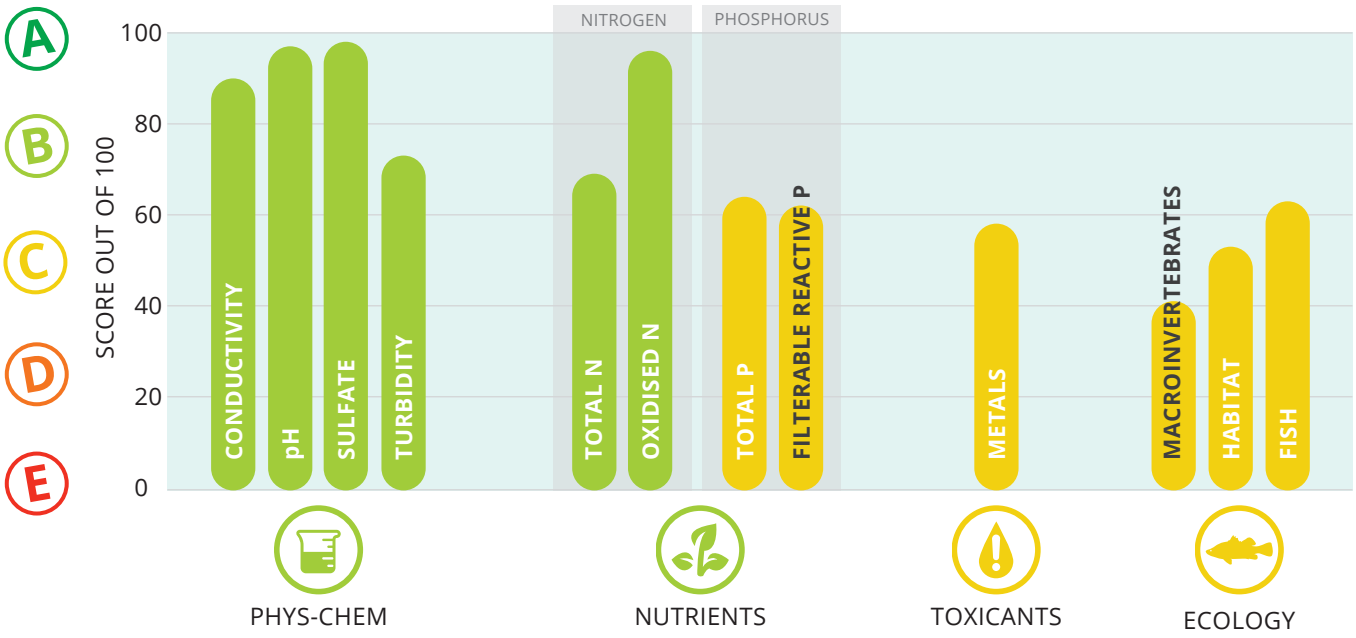
2025–2026
603 mm
16 year avg.
619 mm

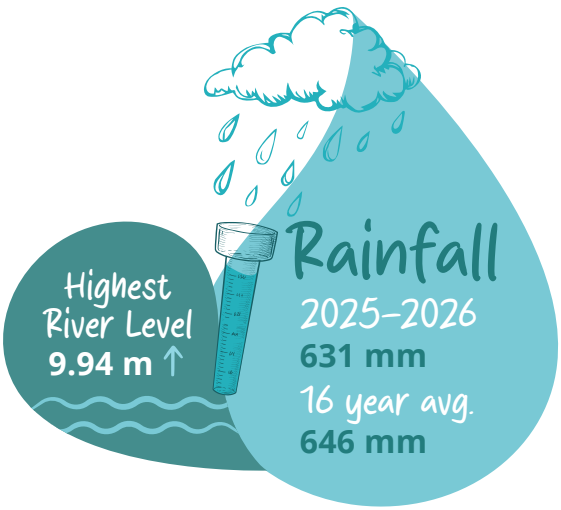
Highest River Level
7.7 m ↑

COMET Catchment B

Macroinvertebrate condition in the Comet catchment improved strongly in 2025–26, rising from D to C. Surveys found a relatively diverse community, including mayflies, stoneflies and caddisflies, which are associated with healthier waterways. Bordered by the Expedition Ranges to the east and the Carnarvon Ranges to the west, the catchment carries the Comet River through the Arcadia Valley, past Rolleston and east of Springsure, to its junction with the Nogoa River near the town of Comet, where the Mackenzie catchment begins. Rainfall averages 800 mm a year in the southern ranges, easing to 500 mm in the north.







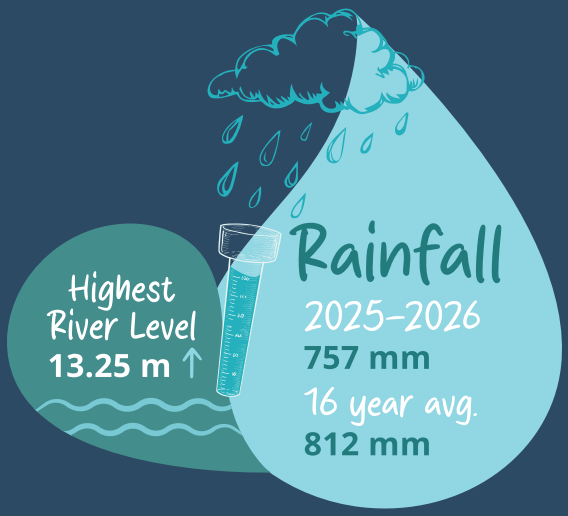
Ecology

Surveys found a relatively diverse community, including mayflies, stoneflies and caddisflies, which are associated with healthier waterways.

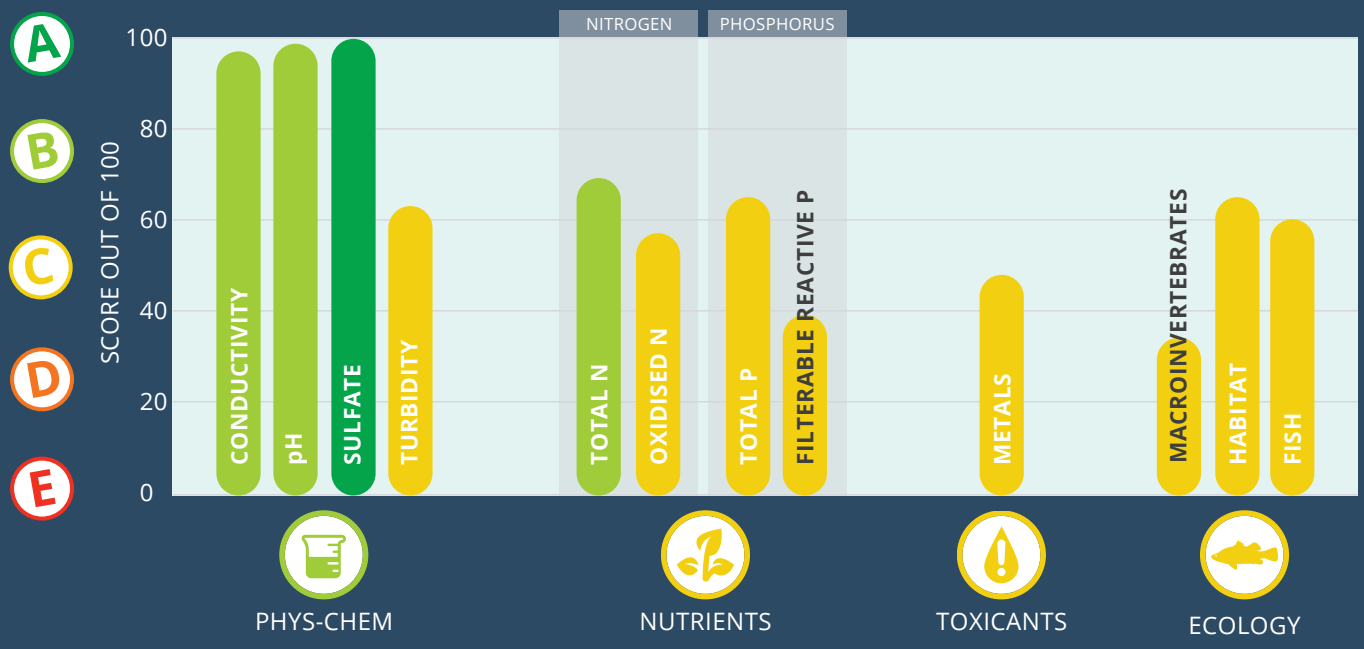


Credit: National Waterbug Blitz

FITZROY Catchment B



Saratoga *Scleropages leichardti* were recorded during fish sampling in the Fitzroy catchment in 2025–26. Known for their prehistoric appearance, Saratoga are predatory freshwater fish native to the Fitzroy River system. They play an important role in the food web, feeding on smaller fish, crustaceans and insects and helping to regulate prey populations. The Fitzroy River begins at the junction of the Dawson and Mackenzie rivers and flows north-east before turning south-east toward the Fitzroy River Barrage. The barrage is Rockhampton's main water supply and acts as a tidal barrier between the freshwater catchment and the estuary. Rainfall exceeds 1000 mm a year in the Byfield and Berserker ranges, easing to 700 mm in the west.





Spotted!

Known for their prehistoric appearance, Saratoga are predatory freshwater fish native to the Fitzroy River system. They play an important role in the food web, feeding on smaller fish, crustaceans and insects and helping to regulate prey populations.



Credit: Nano Tanks Australia

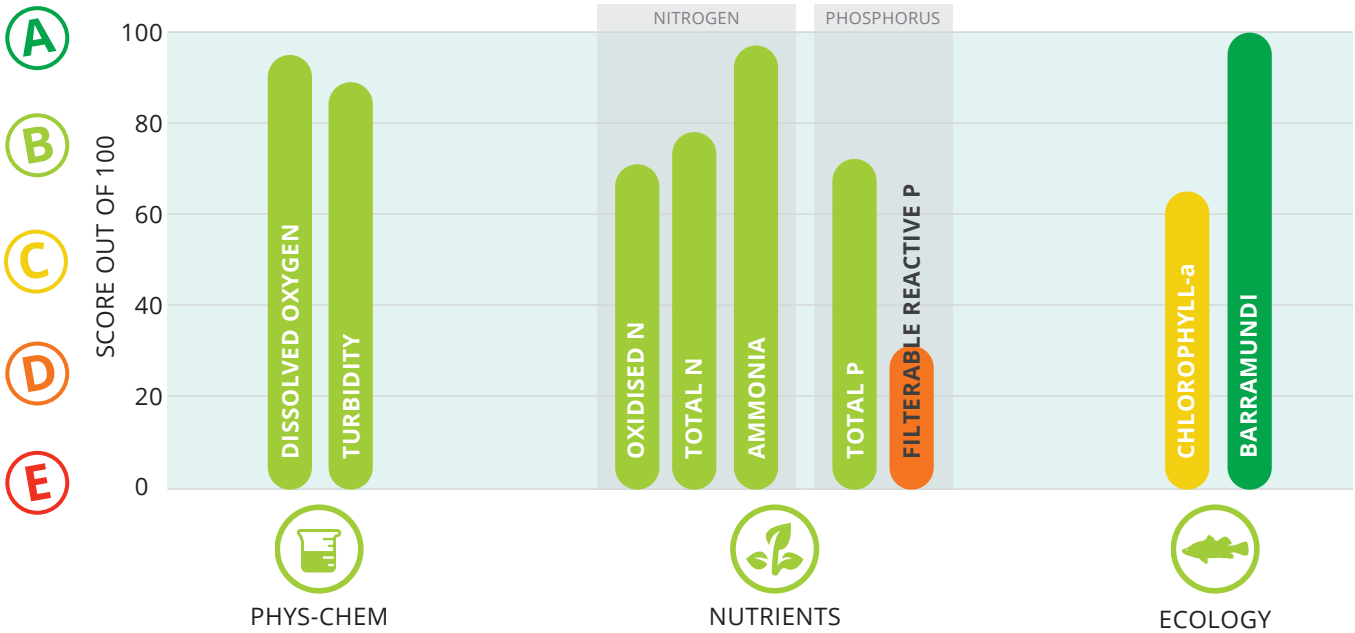
Land Use

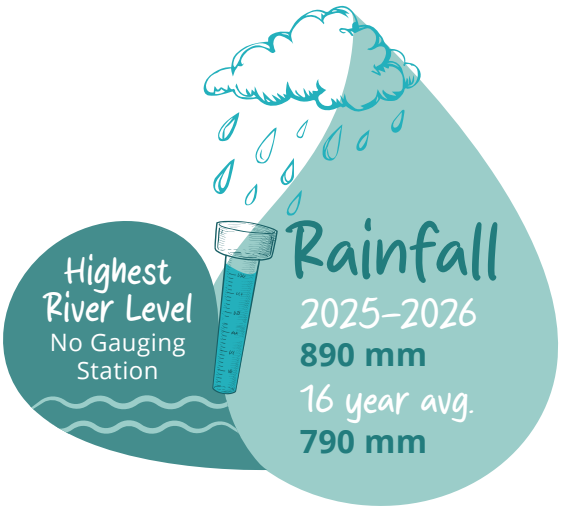


FITZROY Estuary B



The population of juvenile Barramundi *Lates calcarifer* in the Fitzroy Estuary bounced back in 2025–26. This earned the estuary A grade for Barramundi recruitment for the first time since 2020–21. A minor flood and high flows between January and March created favourable conditions for juvenile Barramundi to survive at the estuary monitoring site. Nutrient and Chlorophyll-a results were similar to the previous year, so the improved Estuary grade was driven by Barramundi recruitment. The estuary begins at the Fitzroy River Barrage in Rockhampton and runs 56 km to Keppel Bay. It takes in inner Keppel Bay from Station Point on Curtis Island to Cattle Point near Keppel Sands. With a tidal range of five metres, it includes Port Alma, Raglan Creek, Connor Creek and Balaclava Island, and stretches south to The Narrows. The estuary supports thriving recreational and commercial fisheries and is home to port facilities and salt works.





Ecology

A minor flood and high flows between January and March created favourable conditions for juvenile Barramundi to survive at the estuary monitoring site.



Credit: Mitch Ames



OUR partners

We recognise our valued Partners for their commitment to a collaborative partnership reporting on the condition, sustainable use and resilience of waterways of the Fitzroy Basin community.

BMA BHP Mitsubishi Alliance

Australian Government

Queensland Government

AngloAmerican

GLENCORE

Peabody

stanmore

fba

Jellinbah Group

Australia Pacific LNG

Operated by origin

Rockhampton Regional Council

Santos

Coronado Steel Starts Here

Ensham Resources

ARGO Natural Resources

Heritage Minerals

Kestrel Coal Resources

Magnetic South

stanwell Energy's Future

Central Highlands Regional Council

Queensland resources Council

sunwater

Cotton Australia

CQG Consulting A Beca Company

CQUniversity Australia

Get in touch to find out more

riverhealth.org.au

admin@riverhealth.org.au

Fitzroy Partnership for River Health

fitzroypartnership4riverhealth

Fitzroy Partnership for River Health