

Fitzroy Basin Report Card

2016-17

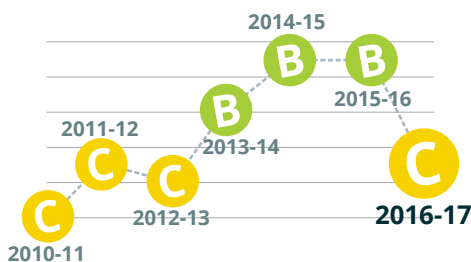


Who is the Fitzroy Partnership?

The Fitzroy Partnership for River Health (the Partnership) is a formal collaboration between government, industry, research organisations and community who all have an interest in the health of waterways across the Fitzroy Basin. The role of the Partnership is to facilitate improved water quality monitoring, collate and assess data, and publicly report on waterway health and sustainable use. Data and results are assessed by an independent scientific panel to ensure annual report cards accurately reflect condition and trends of waterways for ecology, drinking water suitability and agricultural suitability. These annual reports are provided to increase public awareness of waterway health and facilitate better waterway management decision making.

Ecosystem health results

In 2016-17 the Fitzroy Basin received a C grade for aquatic ecosystem health, with a decrease from a B grade last year to a C grade this year. Fitzroy River, Upper Dawson, Lower Isaac and the Estuary were awarded B grades, with all other reporting areas being awarded C grades.



Physical-chemical results were generally good and comparable to the long-term average. Salinity results decreased marginally across many catchments including Fitzroy, Mackenzie, Upper Isaac, Upper Dawson, Theresa and Connors but were stable otherwise. Sulfate results decreased in the Callide, Connors, Lower Isaac, Upper Isaac and Fitzroy, but were stable or improved otherwise. Turbidity results improved for all catchments except for Comet, Connors, Lower Isaac and Mackenzie. pH results were generally excellent or good across all catchments.



Nutrient results declined marginally compared to long-term condition. Overall the nutrient results for catchments were generally B grades, except for Theresa, which only managed a C for nutrients.



Results improved for Upper Isaac, Theresa, Upper Dawson and Lower Dawson but declined for all other freshwater catchments. Nogoa declined from a B grade to an E grade, however this was driven by the ongoing paucity of data for the catchment, with only one aluminium sample at one site contributing to this grade. Copper and Aluminium continue to be the toxicants of interest across the Basin.



Collection of ecology data remains patchy across the Basin. Ecology results were stable or declined where data was available.

2016-17 Results

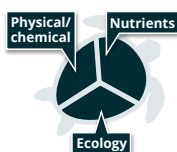
Legend



Freshwater



Estuary



Highs

Upper Dawson received a B grade, with the highest ever score of 88 out of 100, noting that there was no ecology data secured for this catchment and lack of data may have contributed to this change.

Lows

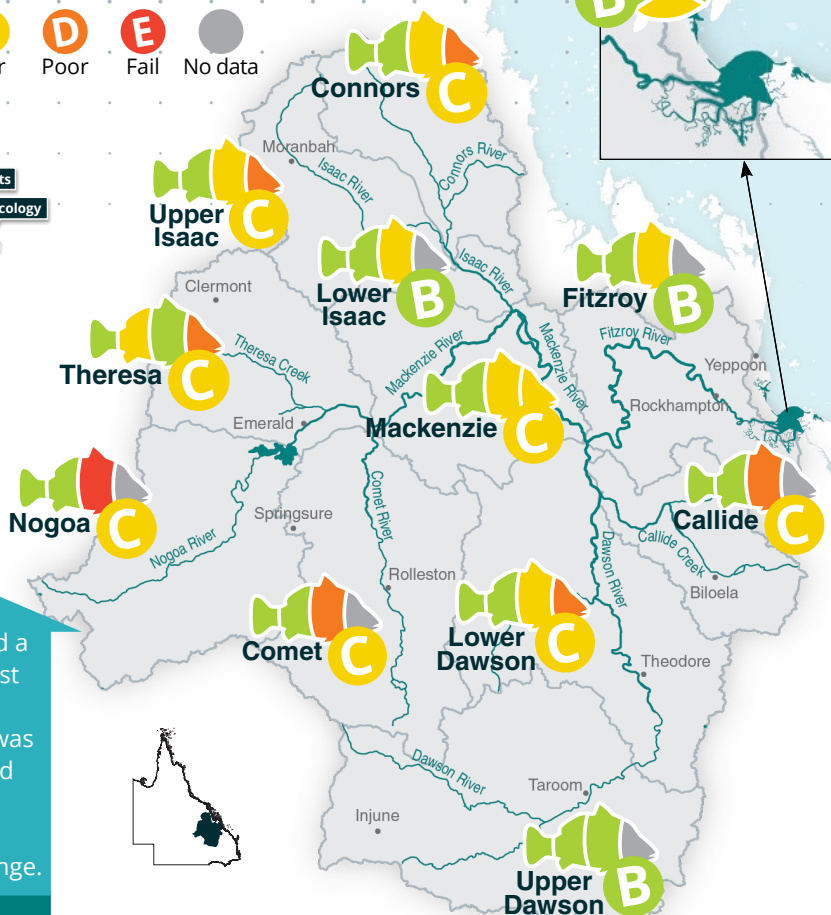
Toxicant results slipped back to D and even E grades for several catchments.

Paucity of ecology data across all catchments and metals data for several catchments has been identified as a notable contributing factor to the change in results year on year.

Weather

An interesting observation is the 2016-17 year aligned closely with 2012-13, both in terms of overall scores and rainfall profile with good rain falling in eastern catchments, and dry conditions to the west. End of dry season groundcover across the basin increased, which may help to explain the improved turbidity results for the year.

Estuary



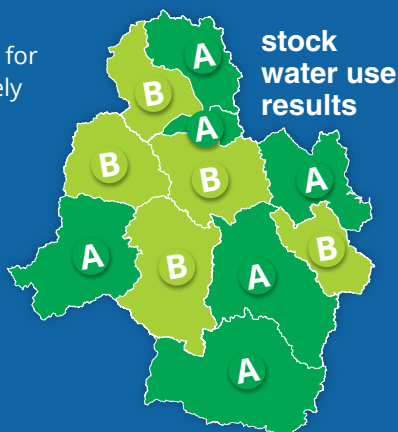
These Report Card grades have been drawn from more than 637,131 sample results at more than 287 sites across the Basin and endorsed by the Independent Science Panel.

Agriculture Use Results

For 2016-17, A and B grades were awarded to all catchments for agricultural use of water. For stock water, Connors, Lower Isaac, Fitzroy, Upper Dawson, Lower Dawson and Nogoia received A grades, and Callide, Comet, Theresa, Mackenzie and Upper Isaac received B grades. For crop water, Connors, Lower Isaac, Fitzroy, Theresa, Upper Dawson, Lower Dawson and Nogoia received A grades, and Callide, Comet, Mackenzie and Upper Isaac received B grades.

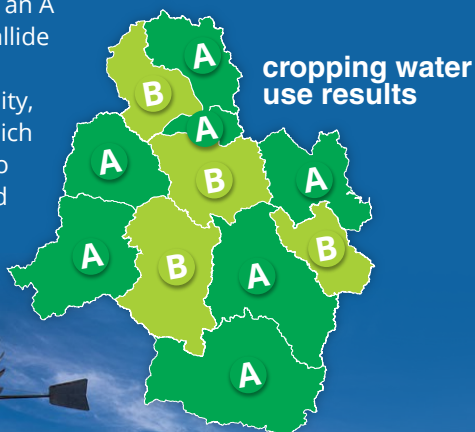
Stock use

Most catchments attained an A grade for stock water use. Aluminium, most likely associated with fine sediment, was detected above guideline values at several sites in the Theresa, Upper Isaac, Comet, Mackenzie and Callide catchments resulting in B grades. For Callide, salinity and copper were also in high enough concentrations at some sites to see this catchment marked as a B.



Crop use

Most catchments attained an A grade for cropping use. Callide had some sites with high sodium, chloride and salinity, cobalt and manganese which resulted in a downgrade to a B grade. Upper Isaac and Mackenzie experienced issues with aluminium and iron, as did Comet which also had high sodium, resulting in B grades for these catchments.



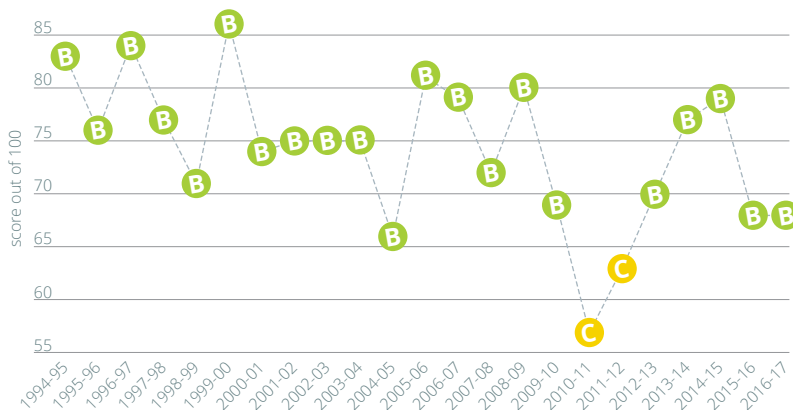
Drinking Water Results

Once again treated water provided for human use in Rockhampton and Central Highlands Regional Council areas was of excellent quality, resulting in A grades for all townships. Results never exceeded health guidelines and only minor exceedances of aesthetic guidelines were recorded for turbidity, pH, electrical conductivity, sodium and total dissolved solids, for some townships. Aesthetic guidelines relate to acceptability of water appearance, taste and odour to the consumer. Minor exceedances of aesthetic indicators are typical of most drinking water supplies in Australia.



Long term estuary trends for Fitzroy Estuary

Water quality data has been collected by the Queensland Government for the Fitzroy River Estuary since 1994. Estuary results spanning more than 2 decades have now been assessed against the various environmental water quality guidelines set for the estuary to produce a long term interactive trend visualisation for the estuary. The overall results for the Estuary have been awarded B grades for most years with C grades awarded for 2010-11 and 2011-12. The year with the highest score was in 1999-2000, with 86 out of 100 and the lowest score was 57 in 2010-11, which was also the year with the biggest flood during the assessment period.



Explore the results for yourself at
riverhealth.org.au/report_card/estuary

Dive into Detail

Marine Report

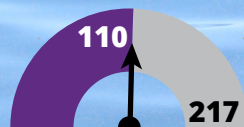
Results for the marine zone adjacent to the Fitzroy Basin can be found at the Queensland Government Reef Plan website reefplan.qld.gov.au

Freshwater and Estuary Ecosystem Report Cards

Looking for data on your local catchment for the latest year? Find it and all previous report cards at riverhealth.org.au/report_card/ehi

Community

A total of 17 community recorders have now collected 110 samples at 61 sites in the Fitzroy. We are helping local communities to collect waterway data in locations that matter and to enter results in the MyWater portal. MyWater is easy to use, creates up-to-date reports and includes a free downloadable 'how to' guide on water sampling and monitoring. Get involved at riverhealth.org.au/report_card/community



Drinking Water Reports

Water for human consumption is of interest to us all. Drinking water reports provide assurance that our tap water has met drinking water guidelines. Find out more at riverhealth.org.au/report_card/drinking-water/

Agriculture Suitability Reports

Agriculture is one of the Basin's major industries. Detailed information on suitability of water for agricultural purposes in each catchment is available at riverhealth.org.au/report_card/ag



Major Partners



Partners



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