



Wet Tropics

Healthy Waterways Partnership

Wet Tropics REPORT CARD 2017

Reporting on data July 2015 to June 2016

wettropicswaterways.org.au



Marine Debris

Community groups cleared 2.62 tonnes of marine debris from Wet Tropics beach clean ups during 2015-16. The majority of the 35,067 items picked up were plastics, which pose a threat to marine wildlife.

*AMD



Fish

The Department of Agriculture and Fisheries assess 37 Wet Tropics marine fish, crabs and a lobster species to determine sustainability of the stocks. Commercial fishers, recreational anglers and seafood processors all contribute valuable data to these assessments. No Wet Tropics stocks are currently classified as overfished.



Banana Industry

The banana industry is working to improve on-farm practices to reduce runoff. By mid-2016, 46 growers completed training in Best Management Practice, covering 6,748 hectares (55% of production land). This figure is expected to grow significantly.

Urban

Regional councils are trialling steam technology to replace the use of herbicides to manage weeds along roadsides and beaches.

Sugar Cane Industry

The cane industry is shifting towards improved practices to reduce runoff. By June 2016, 550 farming businesses were benchmarked in the SmartCane Best Practice program, representing 63% of cane production land. Investment in extension support is expected to increase this figure.



Measuring Progress

The Wet Tropics Report Card tracks changes in the condition of our waterways. It allows us to measure the progress being made by the many innovative caretakers in our region who are working hard to ensure the future health of our waterways.

It also enables us to determine how and where to focus our efforts as a community to improve waterway health.

For 2015-16 the majority of Wet Tropics waterways are graded as good or moderate. These results reflect a continuation of low rainfall conditions.

We are tracking these results over time. Go to www.wettropicswaterways.org.au to track trends.



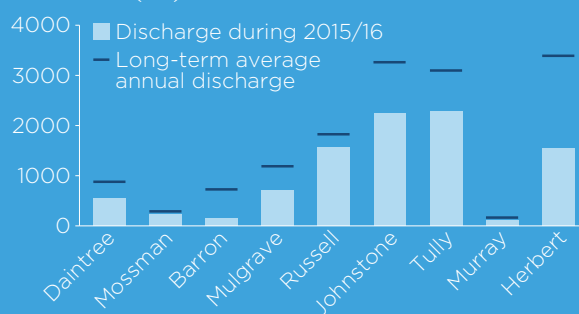
Fish barriers

New research undertaken by the Partnership shows that the movement of fish between freshwater and estuaries is less impacted by barriers than other regions. Most basins were graded good or very good.

Climate

Climatic conditions were similar to the previous reporting period with continuing below average rainfall in most basins. Lower rainfall years can result in reduced sediment, pesticide and nutrient runoff. Discharges from major rivers continued to be below long-term averages.

River flows (GL)



These monitored rivers do not align with reported estuaries

Invasive Weeds

Invasive weeds cause major impacts on waterway health. The Murray and Herbert basins were identified as experiencing the greatest impact (very poor). The basins experiencing least impact were the Tully (very good) and Mulgrave (good).



Coral

The results for coral show improvement in the 2015-16 reporting period. However, offshore reefs were surveyed before the effects of the coral bleaching in early 2016 were fully evident.



Tree Planting

Over 200,000 trees were planted by community groups and councils throughout the region, including riparian zones. These help stabilise streambanks and reduce sediment and nutrient loads entering waterways.

Waterway grades 2015-16

The science behind the grades

These waterway grades were developed by analysing and integrating scientific monitoring data contributed by many organisations. This process was overseen by an independent panel of scientists.

Timing

This Report Card, although released in 2017, presents data from July 2015-June 2016. The time delay is due to the time required for quality control, scientific analysis and expert review.

Extra monitoring

Last year's Wet Tropics Pilot Report Card identified a number of monitoring gaps, some of which have since been addressed by the Partnership to present a more complete picture of waterway health.

For the 2015-16 reporting period an additional four estuaries have been monitored for water quality, and both the Cairns Regional Council and Cassowary Coast Regional Council expanded their estuary monitoring to include additional indicators selected for the Wet Tropics Report Card.

Changed methodology

Since the release of the Pilot Report Card last year, the Partnership has applied improvements to the methodology used to generate estuary and freshwater basin scores, and the offshore coral index. The revised methodology has been applied to both the 2014-15 and 2015-16 results.

More detailed information about the grades and the methods used to generate them can be found on the website.

wettropicswaterways.org.au



economic growth



population growth



climate

Regional drivers

FRESHWATER
Murray

The Murray Basin is graded moderate for habitat and hydrology. There is insufficient data for a water quality grade.

FRESHWATER
Tully

The Tully Basin is graded good overall. It is graded good for water quality, and moderate for habitat and hydrology.

FRESHWATER
Johnstone

The Johnstone Basin is graded good overall. It is graded good for water quality, and moderate for habitat and hydrology.

FRESHWATER
Russell

The Russell Basin is graded good overall. It is graded good for water quality and habitat and hydrology.

FRESHWATER
Mulgrave

The Mulgrave Basin is graded good overall. It is graded good for water quality and habitat and hydrology.

FRESHWATER
Barron

The Barron Basin is graded good overall. Water quality has improved to very good, mainly because of lower concentrations of sediment. Habitat and Hydrology is moderate.

FRESHWATER
Mossman

The Mossman Basin is graded moderate for habitat and hydrology. There is insufficient data for a water quality grade.

FRESHWATER
Daintree

The Daintree Basin is graded very good for habitat and hydrology. There is insufficient data for a water quality grade.

Influence of Burdekin River

Ingham

Tully

Innisfail

Ravenshoe

Atherton

Mareeba

Cairns

Port Douglas

Mossman

Daintree

MARINE
Palm Islands Inshore

Palm Island is graded good overall. It is graded good for water quality and moderate for coral.

ESTUARY
Hinchinbrook

The Hinchinbrook Channel is graded good overall. It is graded very good for water quality and good for habitat and hydrology.

MARINE
South Inshore

The South Inshore Zone is graded moderate overall. It is graded moderate for water quality and coral, and very poor for seagrass.

ESTUARY
Moresby

The Moresby Estuary is graded good overall. It is graded good for water quality and moderate for habitat and hydrology.

ESTUARY
Johnstone

The Johnstone Estuary is graded moderate overall. It is graded good for water quality and moderate for habitat and hydrology.

MARINE
Central Inshore

The Central Inshore Zone is graded moderate overall. It is graded good for water quality and moderate for coral.

ESTUARY
Russell-Mulgrave

The Russell-Mulgrave is graded good overall. It is graded good for water quality and habitat and hydrology.

ESTUARY
Trinity Inlet

Trinity Inlet is graded good overall. It is graded very good for water quality. It is graded moderate for habitat and hydrology due to poor but improving seagrass condition.

ESTUARY
Barron

The Barron Estuary is graded moderate overall. Water quality declined to a moderate grade, mainly because of higher chlorophyll-a concentrations. It is graded moderate for habitat and hydrology.

MARINE
North Inshore

The North Inshore Zone is graded moderate overall. Water quality improved to a good grade, with better scores for water clarity, nutrients and chlorophyll-a. It is graded moderate for coral and poor for seagrass.

ESTUARY
Dickson Inlet

The Dickson Inlet is graded good for habitat and hydrology. There is insufficient data for a water quality grade.

ESTUARY
Daintree

The Daintree Estuary is graded good overall. It is graded good for water quality and moderate for habitat and hydrology.

MARINE
Offshore

The Offshore Zone is graded very good overall. It is graded very good for water quality and good for coral.

Legend

A very good **B** good **C** moderate **D** poor **E** very poor **●** insufficient data

Freshwater indicators

Fish **score** Water quality
Habitat and hydrology

Estuary indicators

Fish **score** Water quality
Habitat and hydrology

Inshore Marine indicators

Fish **score** Water quality
Seagrass Coral

Offshore Marine indicators

Fish **score** Water quality
Coral

NORTH

The Wet Tropics Healthy Waterways Partnership

The Wet Tropics Report Card has been developed by the Wet Tropics Healthy Waterways Partnership as an initiative of the Reef 2050 Long-Term Sustainability Plan. Our aim is to conserve the natural values of our region and improve the condition of our freshwater and estuary waterways that flow to the Great Barrier Reef. The Partnership brings together community, industry, researchers, businesses and all levels of government.

Partnering for healthy tropical waterways and vibrant communities

wettropicswaterways.org.au



Acknowledgement of Country

The Wet Tropics Healthy Waterways Partnership respectfully acknowledges the Traditional Custodians and First People of the land and water on which we work and live.

Wet Tropics Images/Brad Newton

Thanks to our partners



**CANEGROWERS Cairns, CANEGROWERS Herbert River, CANEGROWERS Innisfail, CANEGROWERS Mossman, CANEGROWERS Tablelands, CANEGROWERS Tully

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Kate Hodge, Hodge Environmental

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Contact information

Suzanne Jenkins – Executive Officer
Wet Tropics Healthy Waterways Partnership
E: info@wettropicswaterways.org.au
P: 0429 918934