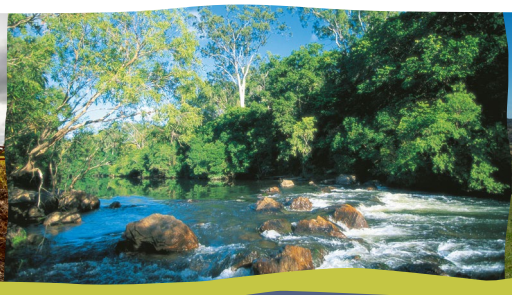


Great Barrier Reef
Report Card 2015
Reef Water Quality Protection Plan

Australian Government

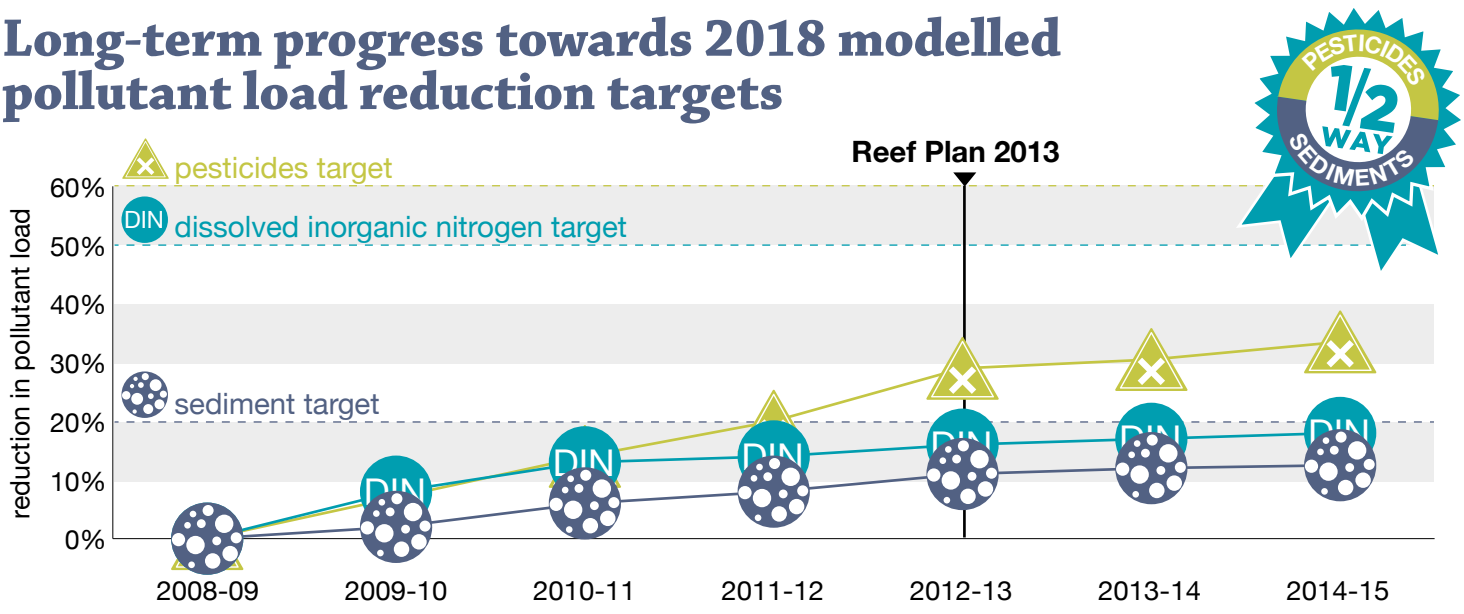
Queensland Government

Results

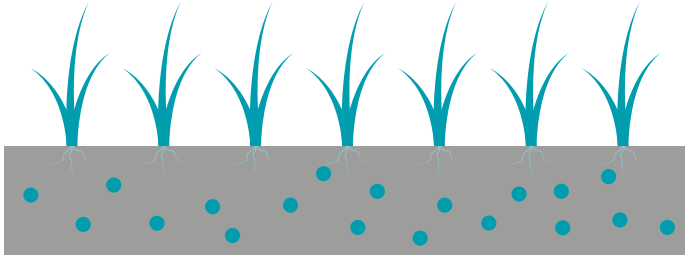
This report card assesses the reported results of Reef Water Quality Protection Plan actions up to June 2015.

Results show the need to accelerate the rate of change and drive innovation to meet the ambitious targets. However, not all activities undertaken during the reporting period are included so the results are considered a conservative estimate of progress.

Long-term progress towards 2018 modelled pollutant load reduction targets



More efficient fertiliser use needed



Inshore marine remained in poor condition

but coral improved from **D→C**

What are we doing?

In 2014-15,

402 graziers **836** sugarcane growers

engaged in industry Best Management Practice programs

Everyone

not just farmers will need to **make changes**

$100s millions towards **BIG TARGETED PROJECTS**

Progress to targets

Management practices

Management practices are assessed using their relative water quality risk. Results show the area managed using best management practice systems as at June 2015.

Catchment indicators

Late dry season ground cover^ is reported for 2014-15 for the entire region.

Catchment loads

Modelling of pollutant load reductions is based on reported improvements in management practice systems. Results are an estimate of the annual average reduction in human caused (anthropogenic) pollutant loads at the end of catchments between 2009 and 2015.

	Sugarcane	Grazing	Horticulture	Grains	Ground cover	Dissolved inorganic nitrogen	Sediment	Pesticides
Indicators								
Confidence#	low–high	low–high	low–high	low–high	low–high	low–high	low–high	low–high
2018 Target	**90%**	**90%**	**90%**	**90%**	**70%**	**50%**	**20%**	**60%**
Great Barrier Reef	**D** 23%	**D** 36%	**C** 47%	**C** 56%	**A** 77%	**E** 18.1%	**C** 12.3%	**C** 33.7%
Cape York	NA	**D** 28%	ND	NA	**A** 84%	NA	**E** 8%	NA
Wet Tropics	**D** 27%	**D** 35%	**C** 56% (bananas only)	NA	**A** 88%	**E** 14.7%	**B** 13.6%	**C** 31.9%
Burdekin	**E** 22%	**D** 44%	**C** 48%	**C** 57%	**B*** 69%	**D** 20%	**A** 17.2%	**E** 23.6%
Mackay Whitsunday	**D** 34%	**D** 32%	ND	NA	**A** 88%	**C** 25.1%	**D** 9.1%	**A** 44%
Fitzroy	NA	**D** 28%	**D** 31%	**C** 56%	**A*** 80%	NA	**E** 5.5%	**E** 4.3%
Burnett Mary	**D** 33%	**D** 42%	**C** 47%	NA	**A** 89%	**B** 31.5%	**E** 3%	**C** 33.1%

Scoring

A Very good **B** Good **C** Moderate **D** Poor **E** Very poor

ND No data available

NA Not applicable in region

C Highlighted scores indicate priority pollutant for region

Indicator confidence: based on expert opinion and direct measures of error.

Further details on the scoring system and qualitative confidence rankings for each indicator are outlined in the supporting technical information on the Reef Water Quality Protection Plan website, www.reefplan.qld.gov.au/scoring.

^ Ground cover monitors pasture and plant litter relative to bare ground across most grazing lands. Areas with very high tree cover are not reported.

* Significant areas of low ground cover within the Burdekin and Fitzroy regions which were drought-declared.

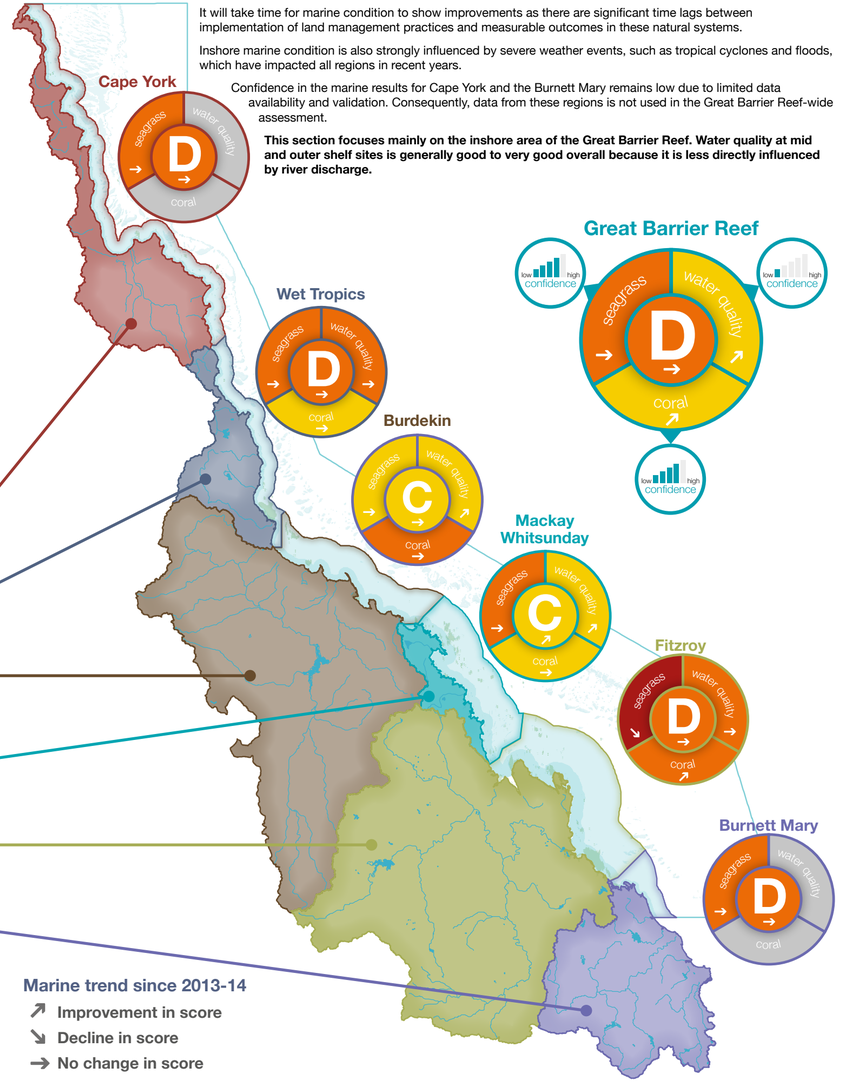
Inshore marine condition 2014-15

It will take time for marine condition to show improvements as there are significant time lags between implementation of land management practices and measurable outcomes in these natural systems.

Inshore marine condition is also strongly influenced by severe weather events, such as tropical cyclones and floods, which have impacted all regions in recent years.

Confidence in the marine results for Cape York and the Burnett Mary remains low due to limited data availability and validation. Consequently, data from these regions is not used in the Great Barrier Reef-wide assessment.

This section focuses mainly on the inshore area of the Great Barrier Reef. Water quality at mid and outer shelf sites is generally good to very good overall because it is less directly influenced by river discharge.



Marine trend since 2013-14

↗ Improvement in score

↘ Decline in score

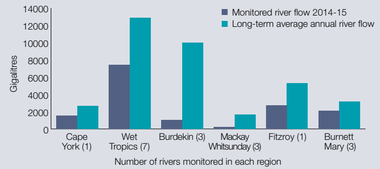
→ No change in score

Marine context

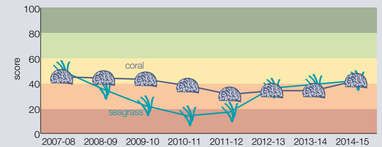
The 2014-15 year was relatively free of severe weather events. However, Tropical Cyclone Marcia crossed the coast north of Rockhampton in February 2015 and Tropical Cyclone Nathan made landfall near Cape Flattery in Cape York in March 2015. Annual rainfall was below average to very much below average resulting in reduced river discharge.

The Burdekin and Mackay Whitsunday regions had significantly lower than average flows.

Monitored river flows in 2014-15



Great Barrier Reef trends in coral cover change and seagrass abundance



The overall condition of the inshore marine environment remained poor in 2014-2015. Inshore seagrass showed signs of recovery at locations that were relatively free from disturbances in recent years, but remained in poor condition overall. Inshore coral reefs have continued to improve since 2011-12 and are now in moderate condition overall.

The long-term trends in key coral and seagrass resilience indicators show these indicators are starting to recover from the cumulative impacts of multiple disturbances in recent years.

Coral bleaching 2015-16

The Great Barrier Reef experienced the worst mass coral bleaching event on record in the summer of 2015-16. Bleaching occurs when live corals are stressed, in this case from overheating. Surveys to assess the extent and severity of coral bleaching show the majority of coral mortality occurred in the 600 kilometre stretch between the tip of Cape York and just north of Lizard Island, near Cooktown. Dive teams will head back out later in 2016 to assess recovery rates of live bleached corals. The impact of the bleaching event will be evident in the next report card and further information is available at http://www.gbrmpa.gov.au/media-room/coral-bleaching

BLEACHING IMPACTS

will be seen in next year's report card

Great Barrier Reef

The Great Barrier Reef receives run-off from 35 major catchments, from Cape York in the north to the Burnett Mary in the south, an area larger than the size of Japan. Grazing is the dominant agricultural land use (77 per cent), particularly in the Burdekin and Fitzroy regions. Sugarcane (1.4 per cent) and horticultural crops (0.2 per cent) occur on the coastal floodplain with high rainfall and/or irrigation. Grain crops and irrigated cotton are grown in inland areas of the Fitzroy region. Pollutant run-off from the catchment impacts the inshore marine environment. Nitrogen runoff from fertiliser is linked to outbreaks of coral eating crown-of-thorns starfish. Sediment reduces the light available to seagrass and inshore coral reefs, affecting coral settlement, growth and reproduction. This ultimately decreases the Great Barrier Reef's ability to recover from the impacts of climate change such as bleaching events and more intense extreme weather events like storms and tropical cyclones.

Reef 2050 Long-Term Sustainability Plan

The Reef 2050 Long-Term Sustainability Plan (www.environment.gov.au/marine/gbr/long-term-sustainability-plan) is the Australian and Queensland governments' 35 year action plan for managing the Great Barrier Reef. Improving water quality is one of the key themes of the plan and it incorporates the goal and targets of the Reef Water Quality Protection Plan (www.reefplan.qld.gov.au) which focuses on reducing the impacts of diffuse source agricultural pollution on the reef.

Great Barrier Reef Report Card

The annual Great Barrier Reef Report Card details progress towards the Reef Water Quality Protection Plan targets. The report card outlines results from the Paddock to Reef program which collects and integrates data and information on agricultural management practices, catchment indicators, catchment loads and the health of the Great Barrier Reef. The Reef 2050 Integrated Monitoring and Reporting Program (www.gbrmpa.gov.au) will build upon existing programs such as the Paddock to Reef program to track progress towards the Reef 2050 targets and objectives.

Contributors

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Queensland Government

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Australian Government Great Barrier Reef Marine Park Authority

Australian Government | Australian Institute of Marine Science

NQ DRY TROPICS

Qld Regional NRM Groups COLLECTIVE

CANEGROWERS

CSIRO

QFF Queensland Farmers' Federation

TropWATER Centre for Tropical Water and Aquatic Ecosystem Research

James Cook University AUSTRALIA

Burnett Mary Regional Group Practical Solutions for Natural Resource Management

Reef Catchments

Cape York Natural Resource Management Ltd

terrain NATURAL RESOURCE MANAGEMENT

Cape York Sustainable Futures

Australian Government Bureau of Meteorology

growcom

fba Fitzroy Basin Association

AGFORCE

Australian Banana Growers' Council Inc.

More information

More information, methods and detailed results can be found on the Reef Plan website, www.reefplan.qld.gov.au.