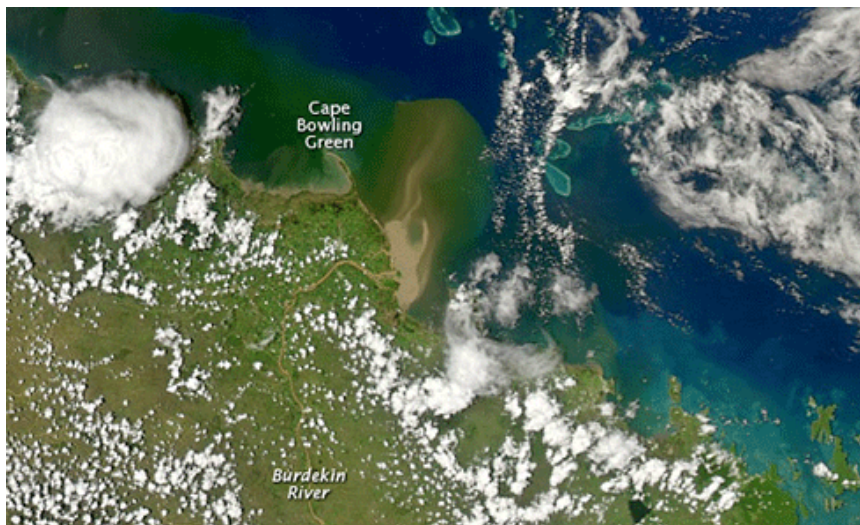


Agricultural runoff main threat to Reef water quality

A 2013 Scientific Consensus Statement on **'Land use impacts on Great Barrier Reef water quality and ecosystem condition'** has found that the health of key Great Barrier Reef ecosystems is deteriorating due to 'continuing poor water quality, cumulative impacts of climate change and increasing intensity of extreme events'.



Credit: NASA

The Statement was developed by an independent group of scientists, with oversight from a [Reef Plan](#) science panel.

The group of scientists – including some from [CSIRO's Water for a Healthy Country and Sustainable Agriculture Flagships](#) – reviewed and synthesised recent scientific findings on water quality in the Great Barrier Reef to reach a consensus on current understanding.

They found that 'the main source of excess nutrients, fine sediments and pesticides from Great Barrier Reef catchments is diffuse source pollution from agriculture'.

The Consensus Statement directly supports the development of the Reef Water Quality Protection Plan (Reef Plan), which has been in place for 10 years. It was updated in 2009 and most recently in 2013.

The Reef Plan's long-term goal is 'to ensure that by 2020 the quality of water entering the reef from broadscale land use has no detrimental impact on the health and resilience of the Great Barrier Reef'.

In the [first Reef Plan report card](#), CSIRO scientists estimated the increase in river pollutant loads since European settlement for all 35 Great Barrier Reef river basins.

They also contributed to more cost-effective water quality improvement in the Reef catchment through research that identifies critical pollutant sources and develops best management practice in grazing and sugarcane.

The 2013 Scientific Consensus Statement was released, and the Reef Plan 2013 endorsed, at the Great Barrier Reef

Ministerial Forum in July. The Forum brings together Australian and Queensland Government Ministers who oversee implementation of the Great Barrier Reef Intergovernmental Agreement.

CSIRO's Drs Frederieke Kroon and Peter Thorburn are lead authors on the Consensus Statement and they also led supporting chapters on 'Sources of pollutants' and 'Agricultural management practices'.

Source: CSIRO

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