What is Reef Plan?
The Reef Water Quality Protection Plan (Reef Plan) sets out activities delivered by government, industry and regional bodies. The Plan has been designed to accelerate the improvement of water quality flowing from agricultural land onto the Great Barrier Reef. It covers regulatory and incentive programs, extension activities, and research and monitoring.

This commitment was put into perspective during the recent devastating natural events across many of the reef catchments, which had flow on impacts to the Great Barrier Reef. If it were not for the steps taken in the past eight years to improve land management, the impacts could have been greater.

What are the goals and targets of Reef Plan?
Reef Plan’s progress and achievements will be assessed annually against the following goals and targets.

Immediate goal – to halt and reverse the decline in water quality entering the reef by 2013

Long-term goal – to ensure that by 2020 the quality of water entering the reef from adjacent catchments has no detrimental effect on the health and resilience of the Great Barrier Reef.

80 per cent of landholders in agricultural enterprises will have adopted improved soil, nutrient and chemical management practices by 2013

50 per cent of landholders in the grazing sector will have adopted improved pasture and riparian management practices by 2013

A minimum 50 per cent reduction in nitrogen and phosphorus loads at the end-of-catchments by 2013

A minimum 50 per cent reduction in pesticides at the end-of-catchments by 2013

A minimum 20 per cent reduction in sediment load at the end-of-catchments by 2020

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Improved condition of riparian areas

There will have been no net loss or degradation of natural wetlands

A minimum of 50 per cent late dry season groundcover on dry tropical grazing land by 2013

Purpose
The Reef Plan First Report Card, released in 2011, provides an important baseline. Progress towards Reef Plan water quality or management practice targets will be reported in subsequent report cards.

This document provides a snapshot of progress to date in implementing Reef Plan actions and expected outcomes.
### Investment

The Australian and Queensland Governments are investing more than $375 million over five years on Reef Plan activities including:

- $200 million by the Australian Government through the Caring for our Country Reef Rescue initiative
- $175 million by the Queensland Government, including $50 million to implement a Reef Protection package of legislation, research, extension and support.

### Actions

Since the release of Reef Plan 2009, significant progress has been made.

- Reef Rescue has continued to be rolled out across all six natural resource management regions bordering the Great Barrier Reef. The initiative has:
  - developed partnerships with regional natural resource management groups and agricultural industries to accelerate the voluntary adoption of best land management practices that have maximum reef water quality benefits
  - engaged over 3600 land managers in farm planning, risk assessment and training in nutrient, pesticide and groundcover management, with more than 2000 participants receiving financial assistance to implement best practices on their properties
  - established an $8.85 million water quality research and development program that is funding 18 projects to enhance our understanding of the links between land management practices and reef health.
- The Great Barrier Reef Protection Amendment Act (Queensland) 2009 was introduced and requires farmers in the high risk catchments—of the Burdekin Dry Tropics, Wet Tropics and Mackay Whitsunday—and in the high risk industries—sugarcane and cattle grazing—to reduce the risk of nutrient, herbicide and sediment runoff from their land.
- Extension services to support the integration of sustainability and productivity have been provided to graziers (Grazing Land Management), cane growers (FutureCane) and grain growers (Grains BMP). More than 2600 landholders have also been engaged in extension activities supporting the new regulations.
- Reef Guardian Councils, which include all 13 coastal local governments from Cape York to Bundaberg, are implementing practices to improve water quality in their region.
- A State Planning Policy was introduced to protect wetlands of high ecological significance within the Great Barrier Reef catchments from high impact earthworks. The Queensland Wetlands Program has also improved management and rehabilitation of wetlands.
- Regulations were introduced, that took effect from October 2009, to protect riparian native vegetation areas up to 50 metres from watercourses.
- The Paddock to Reef Integrated Monitoring, Modelling and Reporting Program was established and is a world leading example of governments working with industry, regional bodies and scientific research organisations to ensure monitoring and modelling is integrated and focussed.
Widespread action is being undertaken across the reef catchments to enable on-ground change and to ultimately increase the adoption of improved management practices and the reduction of pollutant loads. On-ground change is occurring across:

- **1.2 million hectares with industry best management practices as a result of Reef Rescue grants.** Reef Rescue has:
  - distributed $40 million worth of water quality grants in high priority areas and negotiated for an additional $70 million to be contributed by land managers through cash or in-kind
  - worked with graziers to erect approximately 2000 kilometres of new fencing to minimise bank, gully and hillslope erosion
  - supported 625 graziers and 35 dairy farmers in high priority areas to improve groundcover and adopt best management practices on more than 740,000 hectares of land
  - worked with 1350 cane, grain, cotton and horticulture growers in high priority areas to implement best and cutting-edge nutrient and pesticide practices and reduce erosion over more than 473,000 hectares.

- **562,000 hectares with improved practices as a result of Nature Refuges:**
  - during 2009-2010, the number of Nature Refuges in Reef catchments increased by 15 (an additional 209,616 hectares) to 236 (562,282 hectares).

- **500,000 hectares with improved practices in the cane industry as a result of the Reef Protection Package:**
  - 4500 cane growers now take soil tests, calculate and use no more than the optimum amount of fertiliser
  - as at July 2011, 565 cane growers with sugarcane on properties of more than 70 hectares in the Wet Tropics have prepared Environmental Risk Management Plans.

- **12 million hectares with improved practices in the grazing industry as a result of the Reef Protection Package:**
  - As at July 2011, 319 cattle graziers with cattle on properties of more than 2000 hectares in the Burdekin Dry Tropics have prepared Environmental Risk Management Plans with a further 200 having gained an extension of time. All will implement a Grazing Land Management system of pasture management, to improve pasture condition and decrease sediment loss.

- **58,000 hectares with improved practices as a result of the State Rural Leasehold Land Strategy (known as the Delbessie Agreement):**
  - 19 Land Management Agreements have been negotiated where rural leaseholders agree to manage their land sustainably.

This represents a significant proportion of the Great Barrier Reef catchment land area having farmers taking steps to improve their practices.

Other key outcomes include:

- Increased soil testing, which is the first step in better managing land. There has been a 19 fold increase in the number of landholders undertaking soil testing.
- Broadscale remnant clearing ended in 2006. The 2007–2008 annual woody vegetation clearing rate decreased by 48 per cent on the year. Further protection has also been afforded to native regrowth and all native woody regrowth vegetation within 50 metres of a watercourse in the priority Great Barrier Reef regions of the Burdekin, Mackay Whitsunday and Wet Tropics.
Looking ahead to future report cards

Future Report Cards will assess the combined results of all Reef Plan actions. An increased adoption of improved management practices across the industry sectors and reduced loads of pesticides, nutrients and sediments is anticipated.

It is important to recognise there are lags in seeing a response in the marine system as a result of changing land management practices. Research has suggested these could range from two years for pesticides, up to decades for nutrients and sediment. At the paddock scale, monitoring of the on-ground change in land management practices and water quality will show responses much sooner. The immediate impact that these Reef Plan initiatives are having are measurable and allow for forecasts of how they might improve reef health in the long term.

The Second Report Card will provide an assessment of the significant contribution changing land management practices have had in terms of reduced pollutant loads.

The contribution of the Queensland Government’s Reef Protection Package, which requires landholders in high risk catchments and industries to meet a range of legislative requirements which reduce the risk of runoff, will be most evident in the Third Report Card.

Reef Plan is a long term commitment to improve land management that will contribute to protecting the Great Barrier Reef. By 2020 the Plan has a goal of ensuring that the quality of water entering the reef from adjacent catchments has no detrimental effect on the health and resilience of the Great Barrier Reef. Monitoring progress towards the 2013 targets will be an important milestone on that path.