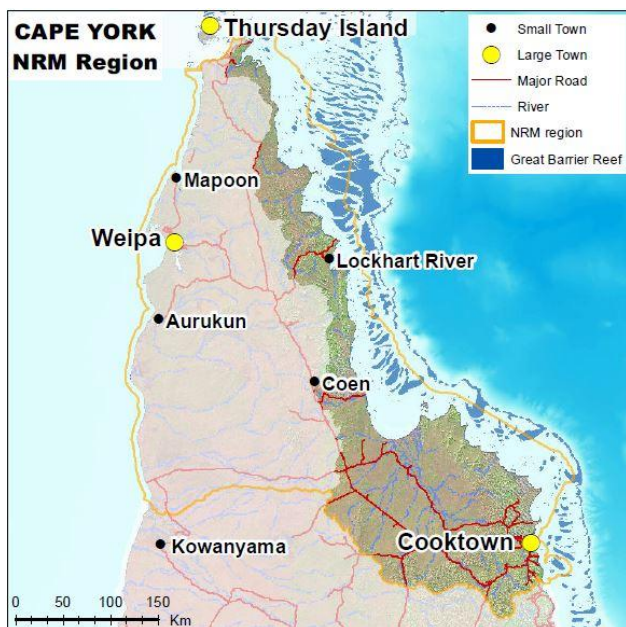


# Cape York region



## Region Priorities

The Cape York region has a long history of grazing activity. The Reef Plan Report Card 2008/09 baseline indicated that over 50 per cent of the land in the reef sub-catchment on the coast was under cattle production.

The priority industry for Cape York is Grazing. Horticulture accounts for less than 1 per cent of the reef catchment area. Monitoring has found elevated levels of nutrients and some pesticides in waterways immediately downstream of intensive agriculture in this region. However, these do not result in significantly elevated concentrations entering the marine environment.

Due to its size and proximity to the Great Barrier Reef, the priority catchment for the region was the Laura/Normanby

## Progress against Water Quality targets

Over the five years of the programme (2008 – 2013), the following was delivered:

Grazing:

- 23 grants were delivered for on-ground work on grazing properties.

- 45 grants were provided for land holder training and extension for grazing improved management practices.
- Land holders implemented improved management practices over 274,910 hectares of grazing land.

Horticulture:

- 14 grants were delivered for on-ground work on horticultural properties.
- 37 grants were provided for land holder training and extension for improved horticultural management practices.

## Proportion and area of industry engaged

15 individual horticultural properties and 26 grazing properties were engaged through the Reef Rescue programme and received funding to implement improved management practices at some stage over 2008 to 2013.

Report Card 2012 and 2013 indicates that 48 per cent of graziers adopted improved land management practices in the region.

Cape York Sustainable Futures estimates that the footprint of properties that have been engaged, and funded to implement improved practices, would cover around 70 per cent of the priority Reef Rescue catchment that is eligible for water quality grants.

However it is important to consider that improving one practice on a property will not mean that all practices are up to the same standard, or adopted over that entire property. Consequently it was recommended that the programme implemented multiple projects on these very large grazing properties to maximise water quality improvements in Cape York.

## Key pollutants

Primarily sediment and particulate nutrients from grazing.

Nutrients, pesticides and sediments from a small area of horticulture.

## Regional Funding

\$4.05 million was provided to the region from 2008 to 2013 to assist in improving land management practices, deliver training and extension and undertake water quality improvement research across the region.

## Load reductions

Modelled load reduction estimates from the Paddock to Reef programme indicate the following load reductions for Cape York between 2009 and 2013:

- 8 per cent reduction in annual average sediment load.
- 8 per cent reduction in annual average particulate nitrogen load.
- 12 per cent reduction in annual average particulate phosphorus load.

It should be noted that the model used assumed that hillslope erosion dominated sediment input. Research in the Normanby indicates that in fact gully and streambank erosion dominate inputs (see Case Study).

## Key Achievements

- Cape York river and stream banks have been protected, through 205 km of fencing erected in riparian areas, with 14,381 ha of riparian area being managed.
- 19 new watering points were established to keep cattle from entering the waterways.
- Over 247,997 hectares, landholders implemented improved management practices utilising water quality grants.
- Changed horticultural irrigation and storm water management practices were implemented over 45 hectares, such as stormwater retention basins and installing an improved irrigation system.
- 13 landholders participated in training to improve horticulture (nutrient) management practices, with some individuals attending multiple training sessions over the 5 years.
- 15 landholders participated in training to improve grazing (sediment) management practices, with some individuals attending multiple training sessions over the 5 years.
- 14 farm management plans were completed and some were revised during the 5 years, and 5 farm risk assessments were developed.

- 800 ha of land had improved management practices implemented to reduce the run-off of nutrients from horticulture.
- 257 ha of land had improved soil management practices implemented to reduce the run-off of sediment from horticulture.

## Case study:

### Understanding erosion in the Cape

*The 2009 Reef Rescue multi-criteria analysis process recommended the need to invest in a programme of work to determine the extent to which water quality in the Cape York region is degraded, the major sources of sediment in the region and the most cost effective management actions to reduce sediment impacts on the adjacent reefs and seagrasses.*

*Griffith University were funded over four years to develop an improved sediment budget for the Normanby catchment (the largest river basin in Cape York) and to work with local land managers to develop farm management plans and trial innovative practices to reduce erosion.*

*The new sediment budget, informed by extensive monitoring, found that previous estimates of hill slope erosion were too high, and that the dominant source of sediment was alluvial gullying associated with rivers and their floodplains. This work highlighted the need for land managers to adopt improved land management practices to prevent new gullies from being initiated and reduce the spread of existing gullies. Recommended practices include fencing off river banks and gullies to exclude cattle, and improving pasture using native perennial grasses.*

*Collaborators on the project included:*

- Reef & Rainforest Research Centre
- Cape York Sustainable Futures
- Southern Cape York Catchments
- Cape York Marine Advisory Group
- Cape York NRM
- Great Barrier Reef Marine Park Authority
- Indigenous Land Corporation