CAPE YORK REGION Lockhart catchment water quality targets

Catchment profile

Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

The Lockhart catchment covers 2883 km² (7% of the Cape York region). Rainfall averages 1589 mm a year, which results in river discharges to the coast of about 1902 GL each year.

The Lockhart catchment lies at the southern end of the northern section of the Cape York region. As with the other catchments in the northern section, it occupies a narrow stretch along the east coast of the Cape York Peninsula. The catchment is divided into a number of smaller sub-catchments. Claudie River includes the small township of Lockhart River and drains the northern section of the Lockhart catchment area. The Lockhart River is the main waterway in the catchment, which is fed by a network of small streams that flow north to a large and ecologically important estuary at Lloyd Bay. The Nesbit and Chester rivers cover the southern section of the Lockhart catchment. The majority of the Lockhart catchment remains undisturbed by human activities and is reserved for nature and cultural conservation, with a very small proportion being for agricultural and urban land use.

Land uses in the Lockhart catchment

The main land uses are nature conservation (91%), water (5%), and grazing (2%).







2025 water quality targets and priorities

Modelled water quality pollutant loads



The 2025 targets aim to reduce the amounts of fine sediments, nutrients (nitrogen and phosphorus) and pesticides flowing to the reef. Where there are minimal anthropogenic pollutant loads, the aim is to maintain current water quality so there are no increases in loads. Each target for sediment and nutrients is expressed as: (a) the percentage load reduction required compared with the 2013 estimated load of each pollutant from the catchment; and (b) the load reductions required in tonnes. Progress made since 2013 will count towards these targets. Previously reported progress between 2009 and 2013 has already been accounted for when setting the targets. The pesticide target aims to ensure that concentrations of pesticides at the end of each catchment are low enough that 99% of aquatic species are protected. The targets are ecologically relevant for the Great Barrier Reef, and are necessary to ensure that broadscale land uses have no detrimental effect on the reef's health and resilience.

A high percentage reduction target may not necessarily mean it is the highest priority. The priorities (ranked by colour) reflect the relative risk assessment priorities for water quality improvement, based on an independent report, the <u>2017 Scientific Consensus Statement</u>. The priorities reflect scientific assessment of the likely risks of pollutants damaging coastal and marine ecosystems.



Hillslope

Most sediment erosion comes from hillslopes and streambanks in the Lockhart catchment.



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Not assessed

The Lockhart catchment has minimal anthropogenic dissolved inorganic nitrogen loads and very small loads

