

WET TROPICS REGION

Tully catchment water quality targets

Catchment profile

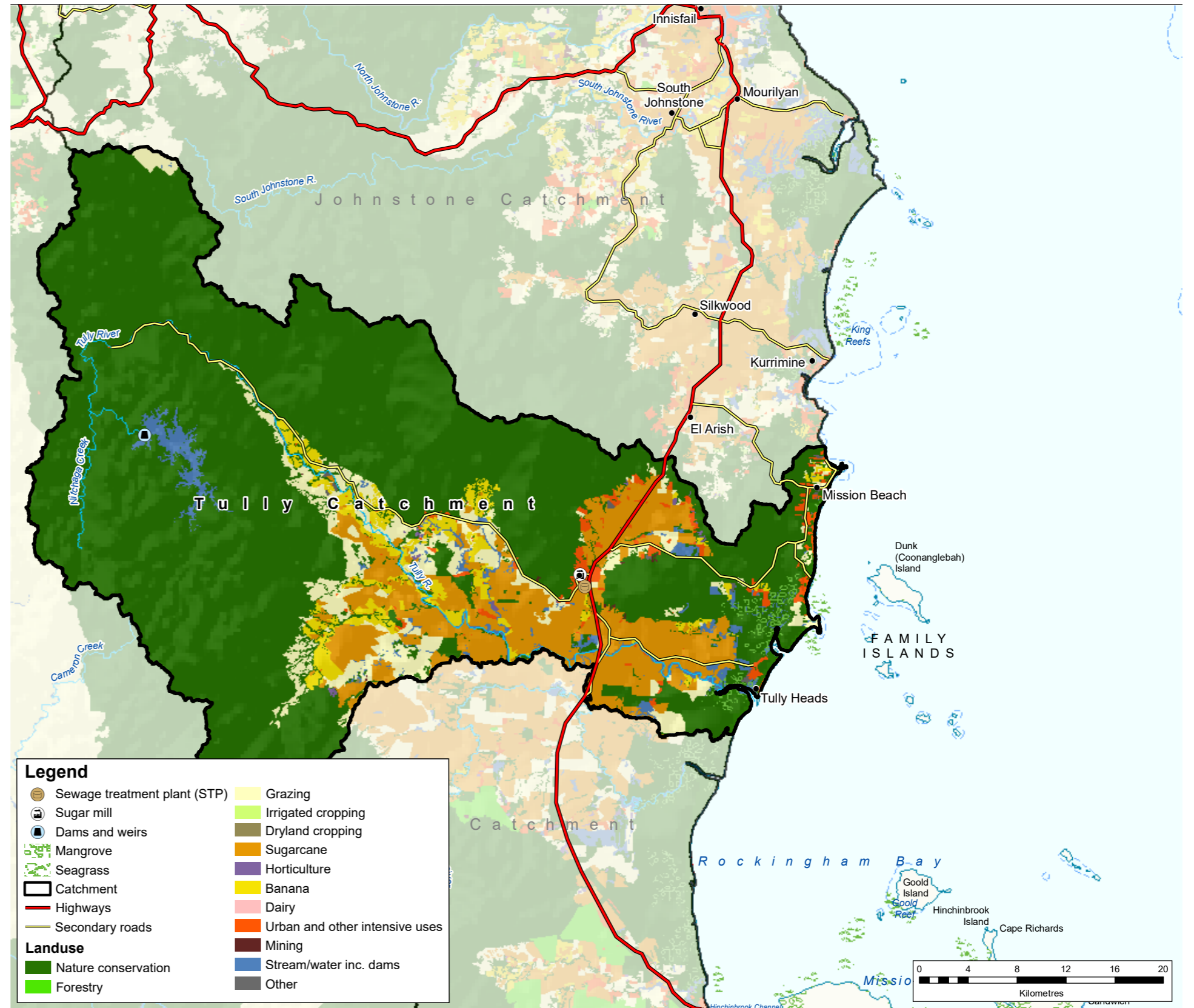
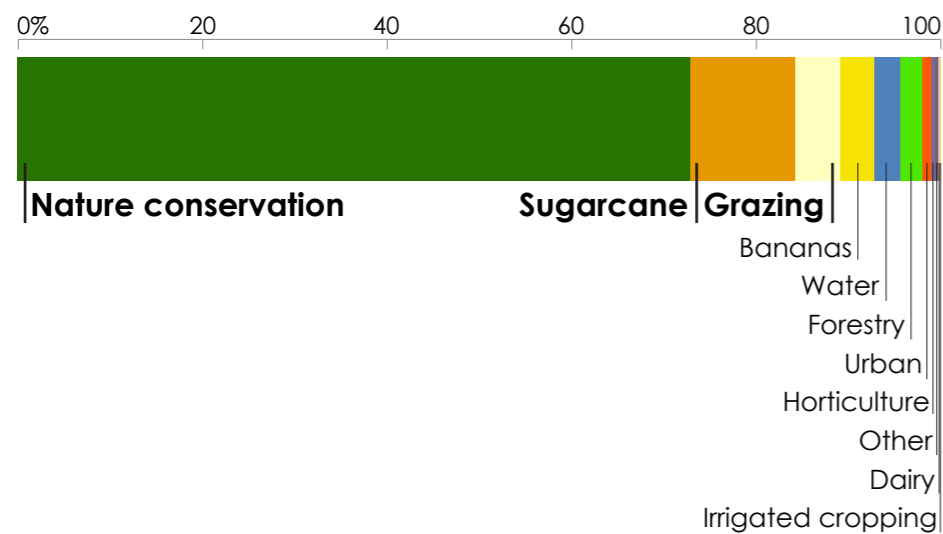
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

The Tully catchment covers 1683 km² (8% of the Wet Tropics region). Rainfall averages 2763 mm a year, which results in river discharges to the coast of about 3527 GL each year.

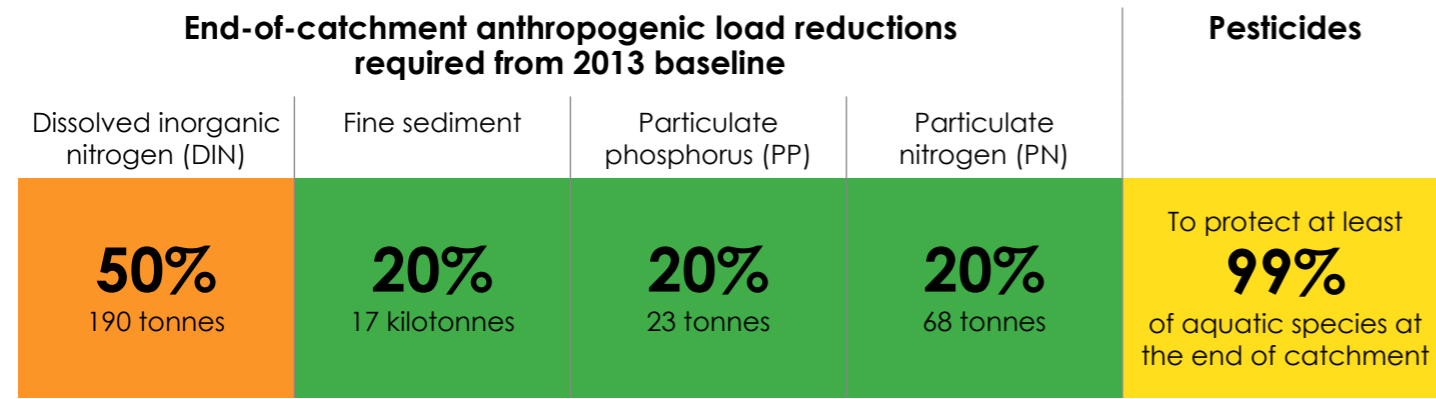
The Tully catchment is located in the southern section of the Wet Tropics region. The majority of the catchment is drained by the Tully River, with the remaining area captured by the Hull River and a number of smaller coastal creeks. The upper reaches of the Tully River are fed by streams emerging from rainforests of the Wet Tropics World Heritage Area in the coastal mountain ranges. The Koombooloomba Dam is also located in the upper catchment area. The lowland floodplains of the Tully catchment have intensive agricultural land use, principally of sugarcane, grazing and banana crops. Small pockets of urban areas are present, which include the township of Tully at the foot of the mountain range and several smaller coastal localities, including Hull Heads, Tully Heads and Mission Beach.

Land uses in the Tully catchment

The main land uses are nature conservation (73%), sugarcane (11%), and grazing (5%).



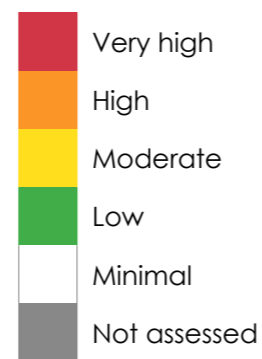
2025 water quality targets and priorities



The 2025 targets aim to reduce the amounts of fine sediments, nutrients (nitrogen and phosphorus) and pesticides flowing to the reef. 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 [2017 Scientific Consensus Statement](#). The priorities reflect scientific assessment of the likely risks of pollutants damaging coastal and marine ecosystems.

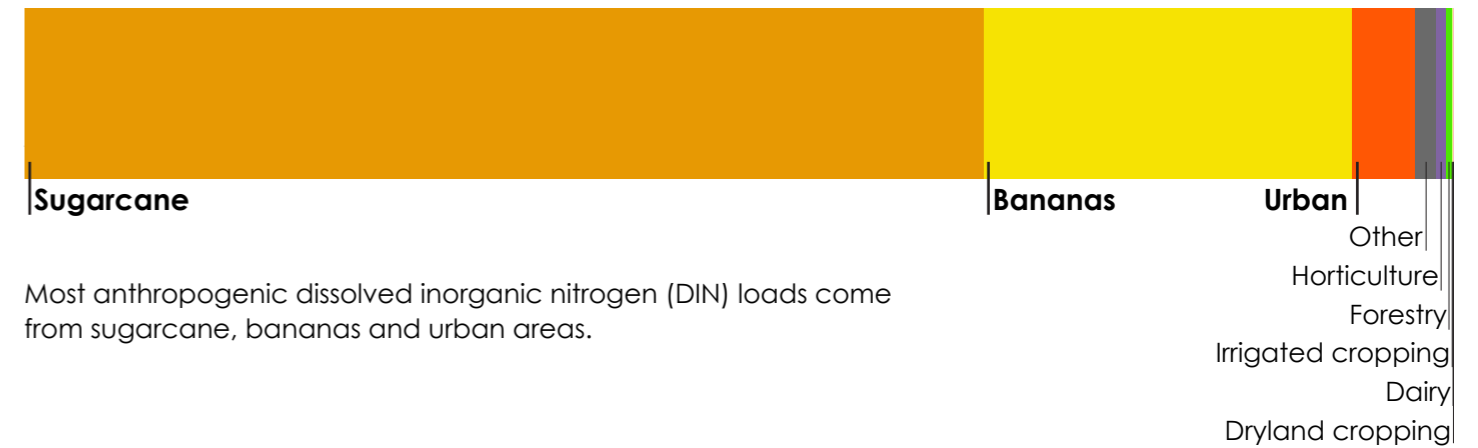
Water quality relative priority



Modelled water quality pollutant loads

The Tully catchment contributes high loads of anthropogenic dissolved inorganic nitrogen, mostly from sugarcane. There are also small loads of fine sediment.

Dissolved inorganic nitrogen



Most anthropogenic dissolved inorganic nitrogen (DIN) loads come from sugarcane, bananas and urban areas.

Fine sediment



Most anthropogenic fine sediment loads come from sugarcane, streambank erosion, grazing and bananas.

Types of sediment erosion



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



Australian Government



Queensland Government