### FITZROY REGION

# Styx catchment water quality targets

#### **Catchment profile**

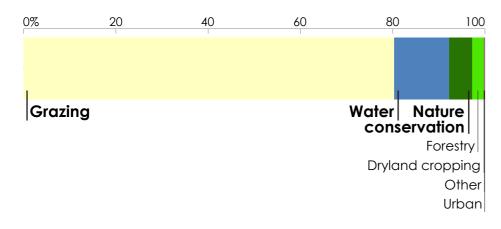
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

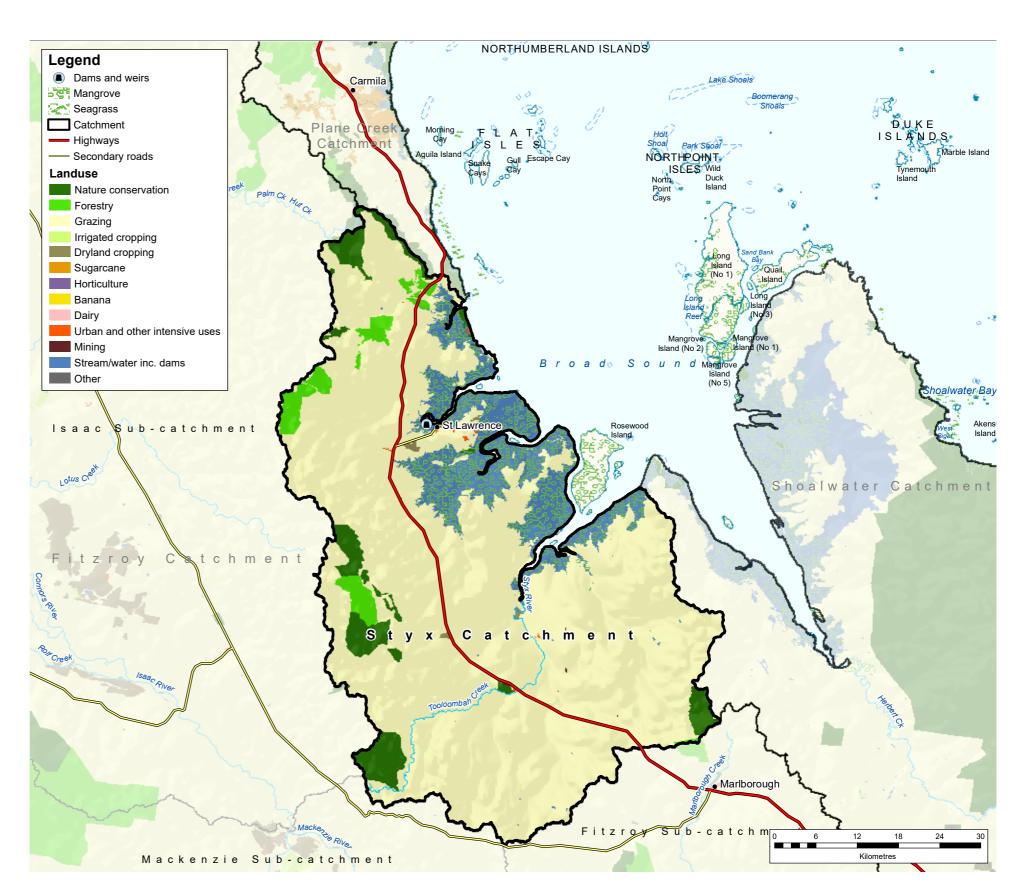
The Styx catchment covers 3013 km<sup>2</sup> (2% of the Fitzroy region). Rainfall averages 835 mm a year, which results in river discharges to the coast of about 851 GL each year.

The Styx is the northernmost catchment on the coastal fringe of the Fitzroy region. The catchment is bordered by coastal mountain ranges in the west, from which emerge the upper reaches of a number of the small waterways, which drain the catchment area. The main waterway is Styx River in the south, along with St Lawrence and Waverley creeks further north. The catchment area is dominated by grazing, with small areas of conservation and forestry land uses.

#### Land uses in the Styx catchment

The main land uses are grazing (80%), water (12%), and nature conservation (5%).





#### 2025 water quality targets and priorities

#### End-of-catchment anthropogenic load reductions **Pesticides** required from 2013 baseline Dissolved inorganic Fine sediment Particulate Particulate nitrogen (DIN) nitrogen (PN) phosphorus (PP) To protect at least maintain maintain maintain maintain current load current load current load current load of aquatic species at the end of catchment

The Styx catchment has minimal anthropogenic pollutant loads. The aim is to maintain current water quality so that there are no increases in sediment or nutrient loads.

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 <u>2017 Scientific Consensus Statement</u>. The priorities reflect scientific assessment of the likely risks of pollutants damaging coastal and marine ecosystems.

## Water quality relative priority

