

BURNETT MARY REGION

Burrum catchment water quality targets

Catchment profile

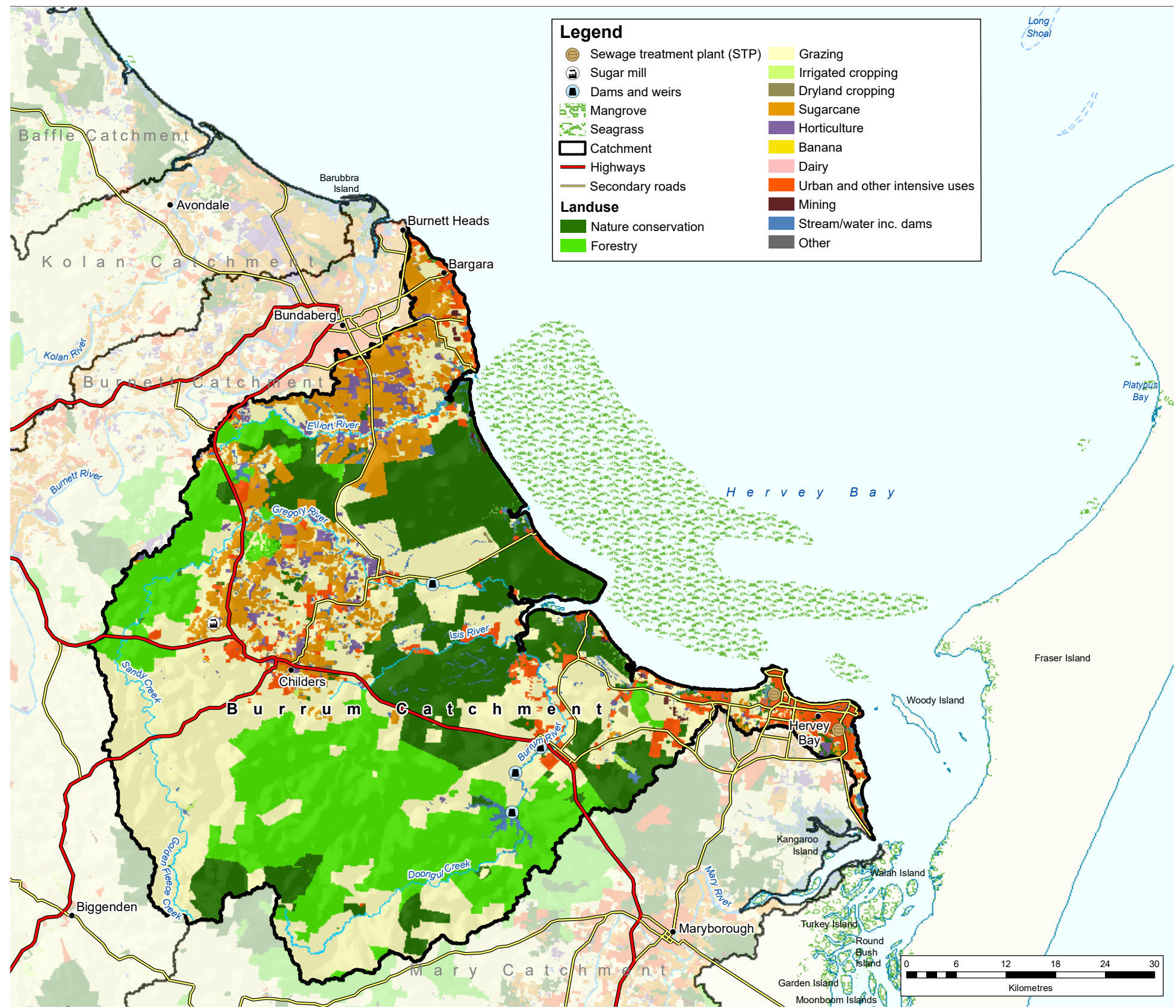
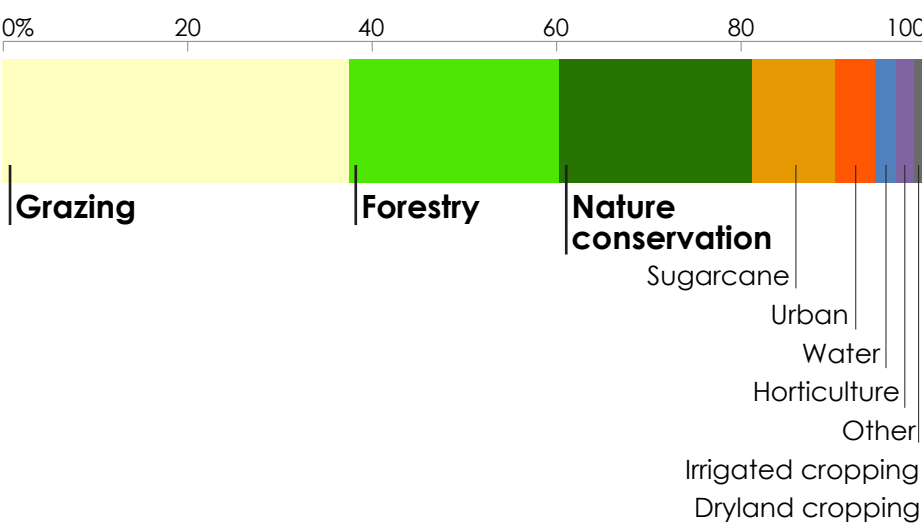
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

The Burrum catchment covers 3362 km² (6% of the Burnett Mary region). Rainfall averages 902 mm a year, which results in river discharges to the coast of about 379 GL each year.

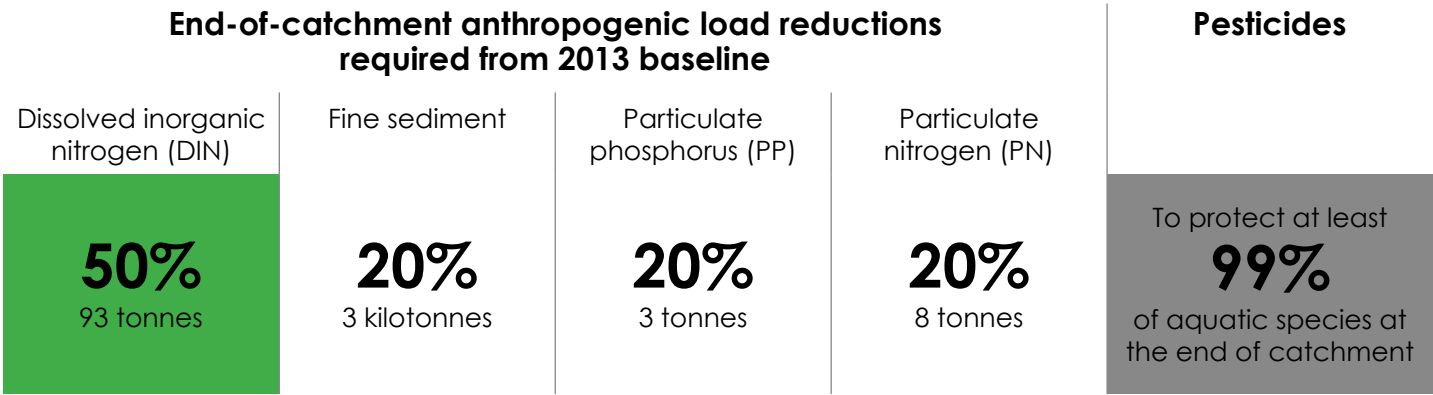
The Burrum catchment is located on the central coast of the Burnett Mary region and is generally low and flat, typical of a coastal catchment of its size. The Burrum catchment includes four major waterways, the Gregory, Isis, Cherwell and Burrum rivers, which converge at the Burrum River estuary near the mouth of the river. The Burrum catchment is dominated by agriculture and has the greatest area of sugarcane in the Burnett Mary region. The headwaters of the Burrum River are mostly used for forestry. Grazing is prevalent throughout the non-coastal areas, and national parks are also common. The headwater areas of the Isis and Gregory rivers include forestry and irrigated cropping and horticulture, and the lower reaches are used mainly for grazing.

Land uses in the Burrum catchment

The main land uses are grazing (38%), forestry (23%), and nature conservation (21%).



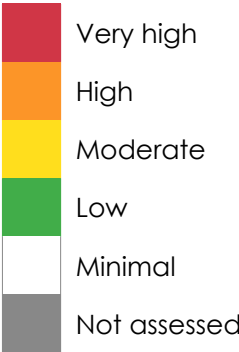
2025 water quality targets and priorities



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.

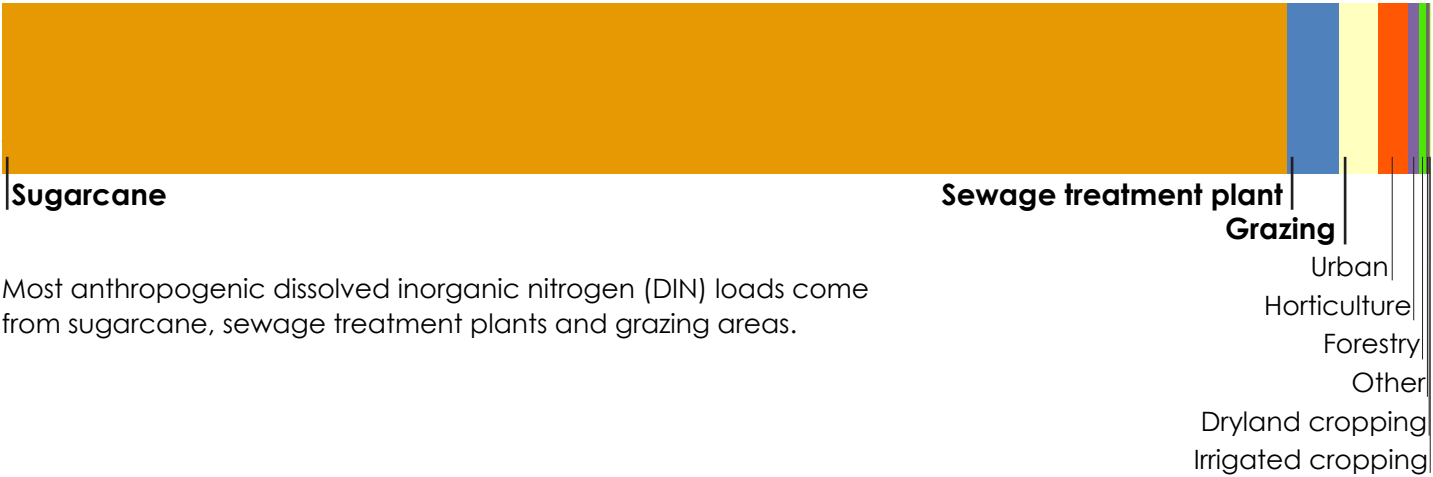
Water quality relative priority



Modelled water quality pollutant loads

Of the Burnett Mary catchments, the Burrum contributes the third largest loads of anthropogenic dissolved inorganic nitrogen. Most of it comes from sugarcane. There are also very small loads of fine sediment, mostly from grazing.

Dissolved inorganic nitrogen



Most anthropogenic dissolved inorganic nitrogen (DIN) loads come from sugarcane, sewage treatment plants and grazing areas.

Fine sediment



Most anthropogenic fine sediment loads come from grazing, urban, streambank erosion, horticulture, forestry and sugarcane areas.

Types of sediment erosion



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

