

# BURNETT MARY REGION

## Burnett catchment water quality targets

### Catchment profile

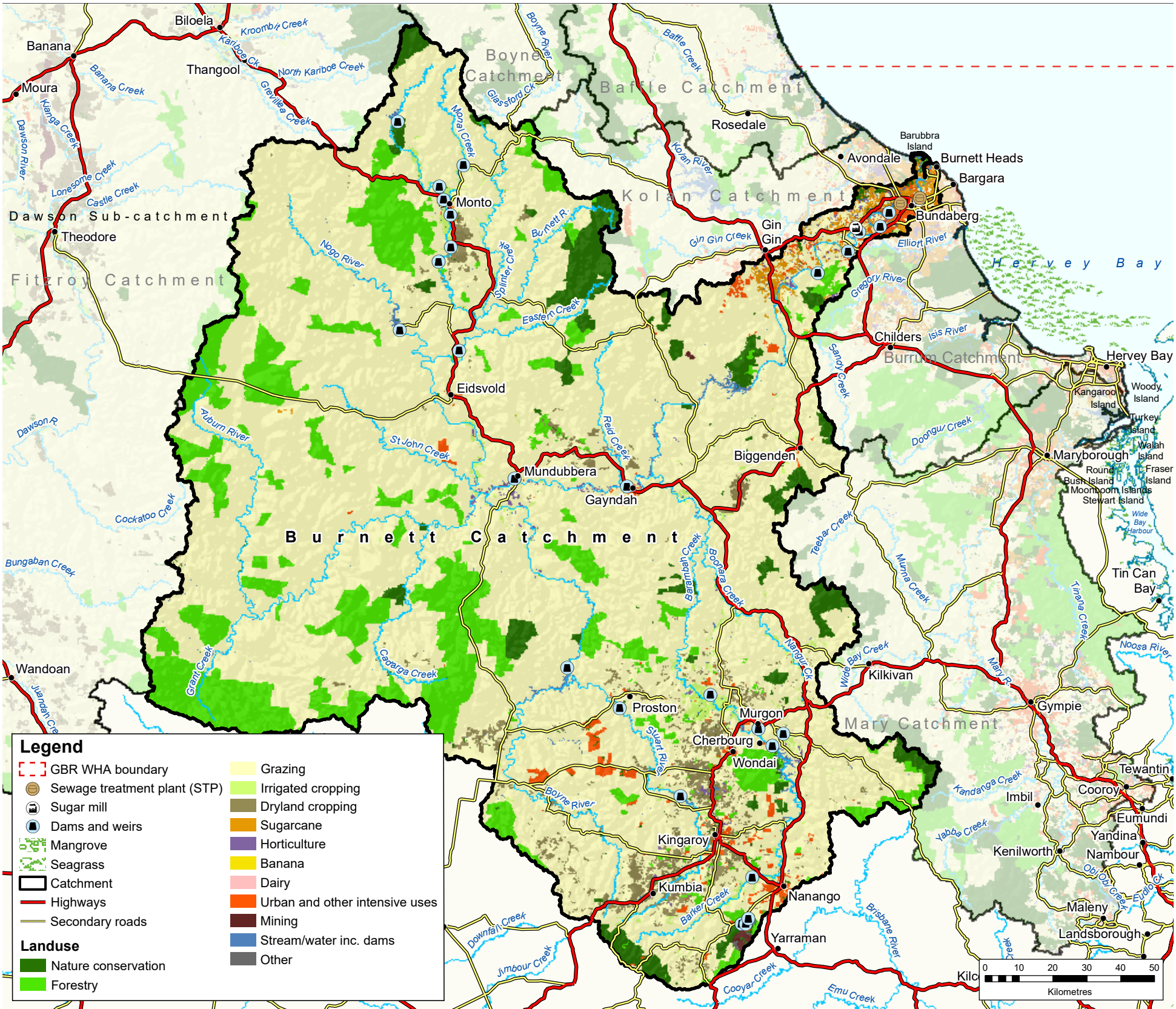
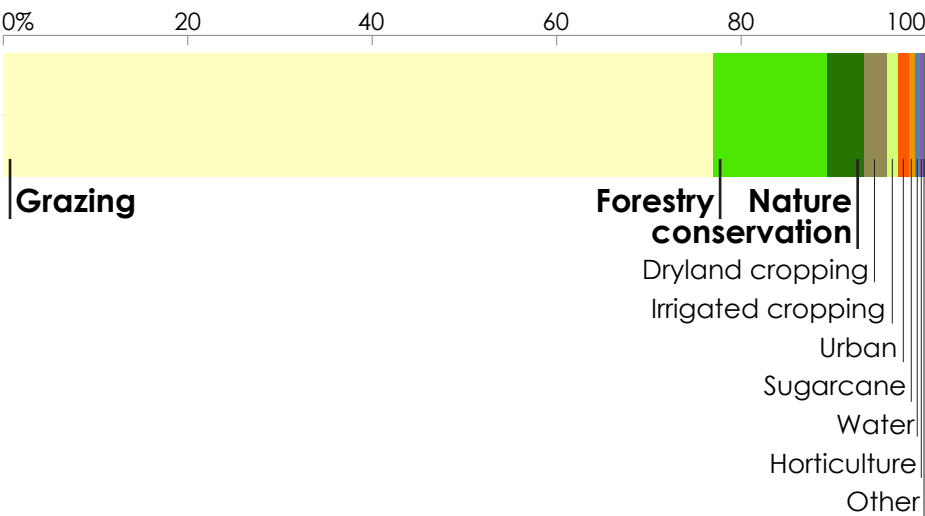
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

The Burnett catchment covers 33,207 km<sup>2</sup> (63% of the Burnett Mary region). Rainfall averages 688 mm a year, which results in river discharges to the coast of about 1076 GL each year.

The Burnett catchment is the largest catchment in the Burnett Mary region, with the bulk of the catchment area sitting inland behind the Baffle, Kolan, Burrum and Mary catchments. The Burnett River captures the waters from the whole catchment, with its headwaters rising from the Bunya Mountains in the southernmost point of the Burnett Mary region. Five major tributaries, Three Moon Creek, Auburn River, Barker Creek, Barambah Creek and Stuart River, join the Burnett River at various points as it makes its way to the coast where its waters discharge into the Great Barrier Reef Marine Park. There are areas of sugarcane and horticulture near the coast but the dominant land use is grazing. The township of Bundaberg sits near the mouth of the Burnett River.

### Land uses in the Burnett catchment

The main land uses are grazing (77%), forestry (12%), and nature conservation (4%).



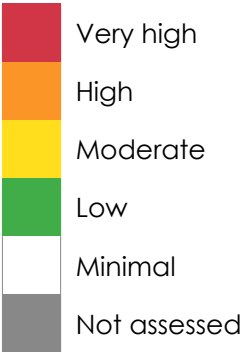
2025 water quality targets and priorities

End-of-catchment anthropogenic load reductions required from 2013 baseline				Pesticides
Dissolved inorganic nitrogen (DIN)	Fine sediment	Particulate phosphorus (PP)	Particulate nitrogen (PN)	
70% 150 tonnes	20% 85 kilotonnes	20% 29 tonnes	20% 68 tonnes	To protect at least 99% of aquatic species at the end of catchment

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.

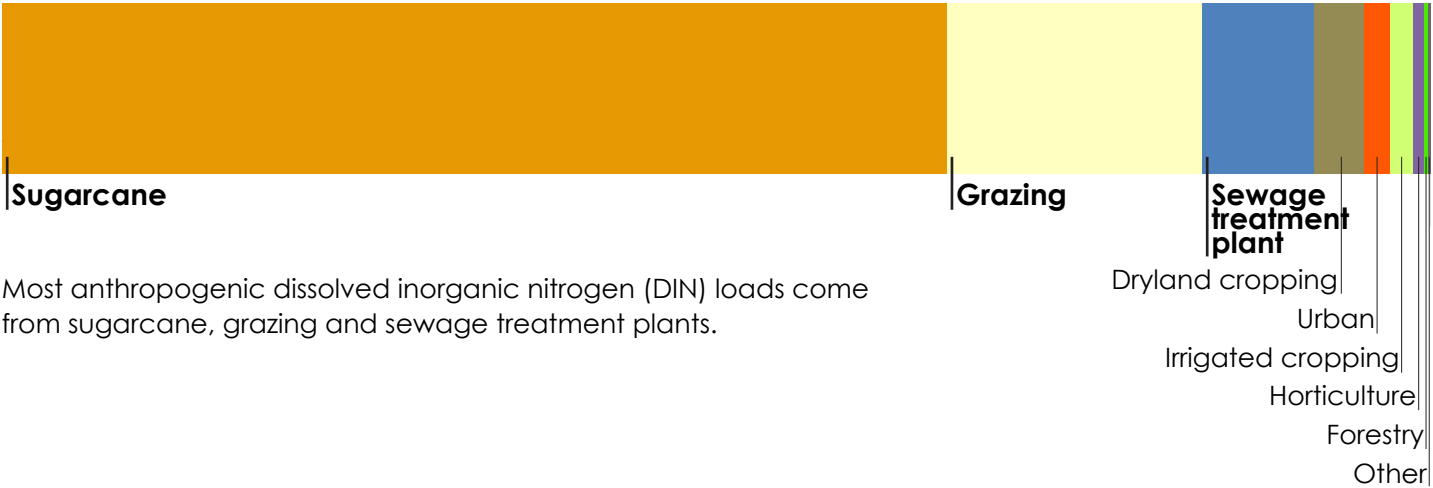
Water quality relative priority



Modelled water quality pollutant loads

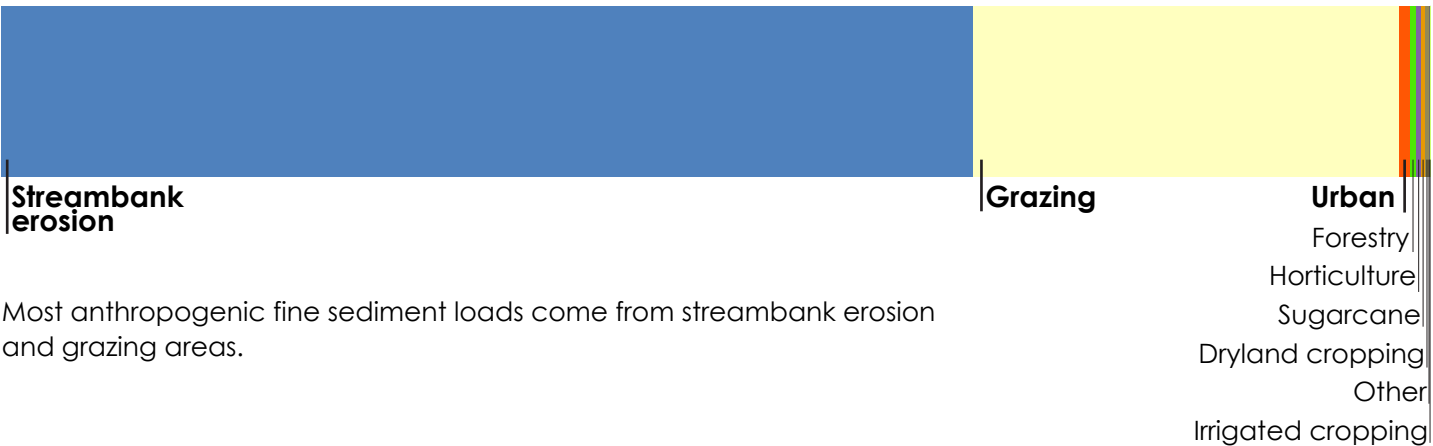
The Burnett catchment contributes the second largest anthropogenic loads of dissolved inorganic nitrogen and fine sediment in the region. Most of the dissolved inorganic nitrogen comes from sugarcane, and most of the sediment from streambank erosion. The Burnett is one of the five highest contributors of fine sediment of the 35 catchments that drain to the Great Barrier Reef.

Dissolved inorganic nitrogen



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

Fine sediment



Most anthropogenic fine sediment loads come from streambank erosion and grazing areas.

Types of sediment erosion



Most sediment erosion comes from streambanks and gullies in the Burnett catchment.