

Baffle catchment water quality targets

Catchment profile

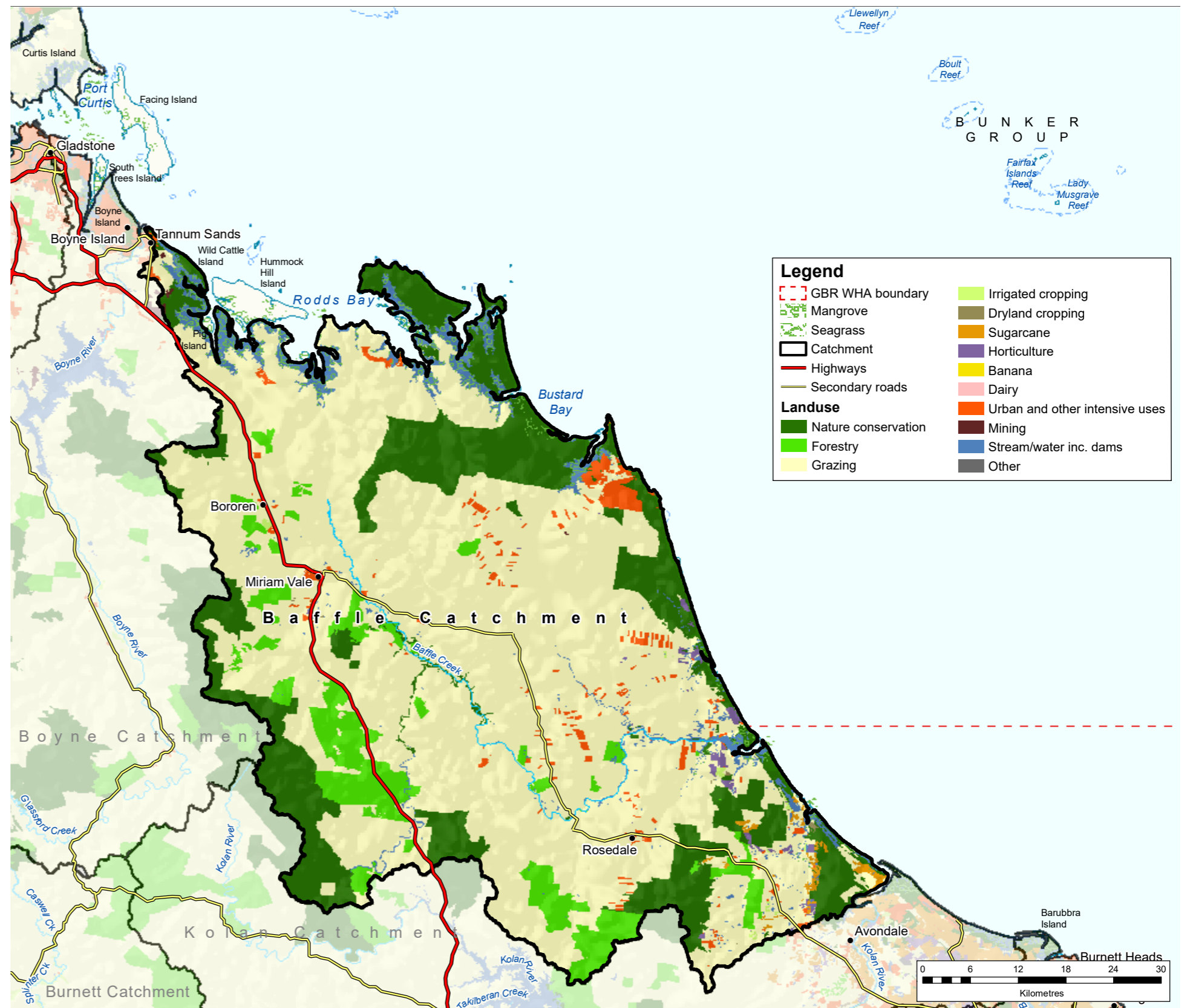
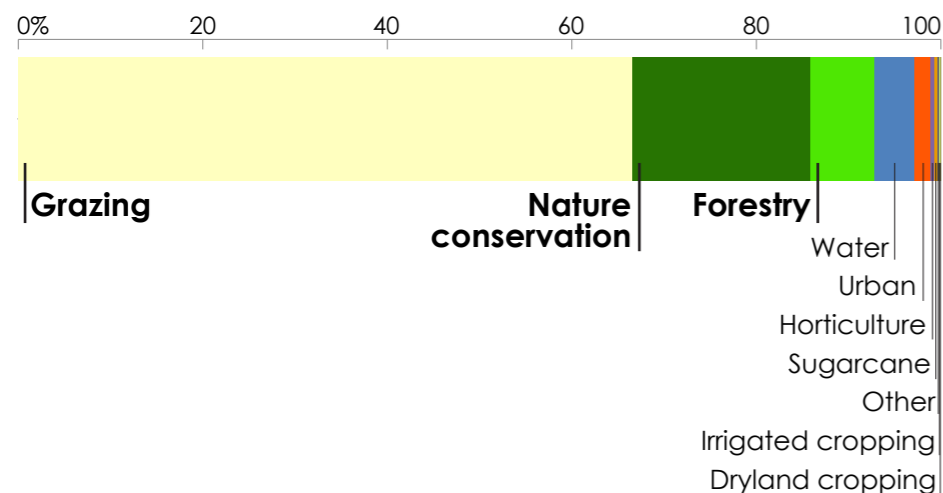
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

The Baffle catchment covers 4085 km² (8% of the Burnett Mary region). Rainfall averages 1045 mm a year, which results in river discharges to the coast of about 797 GL each year.

The Baffle catchment is the northernmost catchment in the Burnett Mary region. It lies adjacent to the Mackay/Capricorn section of the Great Barrier Reef Marine Park on the coast, with mountain ranges bordering the catchment in the south and west. The main waterway, Baffle Creek, captures the whole western section of the catchment, which is primarily grazing land with smaller areas of forestry and conservation. The coastal fringe is mostly used for grazing. A number of small creeks flow straight to the coast which includes seven relatively pristine estuaries.

Land uses in the Baffle catchment

The main land uses are grazing (67%), nature conservation (19%), and forestry (7%).



2025 water quality targets and priorities

End-of-catchment anthropogenic load reductions required from 2013 baseline

Dissolved inorganic nitrogen (DIN)	Fine sediment	Particulate phosphorus (PP)	Particulate nitrogen (PN)
50% 16 tonnes	20% 11 kilotonnes	20% 15 tonnes	20% 33 tonnes

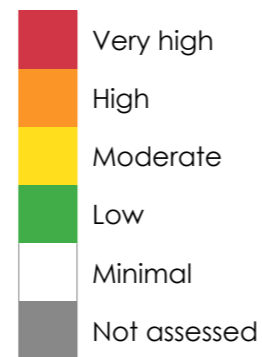
The 2025 targets aim to reduce the amounts of fine sediments, nutrients (nitrogen and phosphorus) and pesticides flowing to the reef. Each target for sediment and nutrients is expressed as: (a) the percentage load reduction required compared with the 2013 estimated load of each pollutant from the catchment; 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.

Pesticides

To protect at least **99%** of aquatic species at the end of catchment

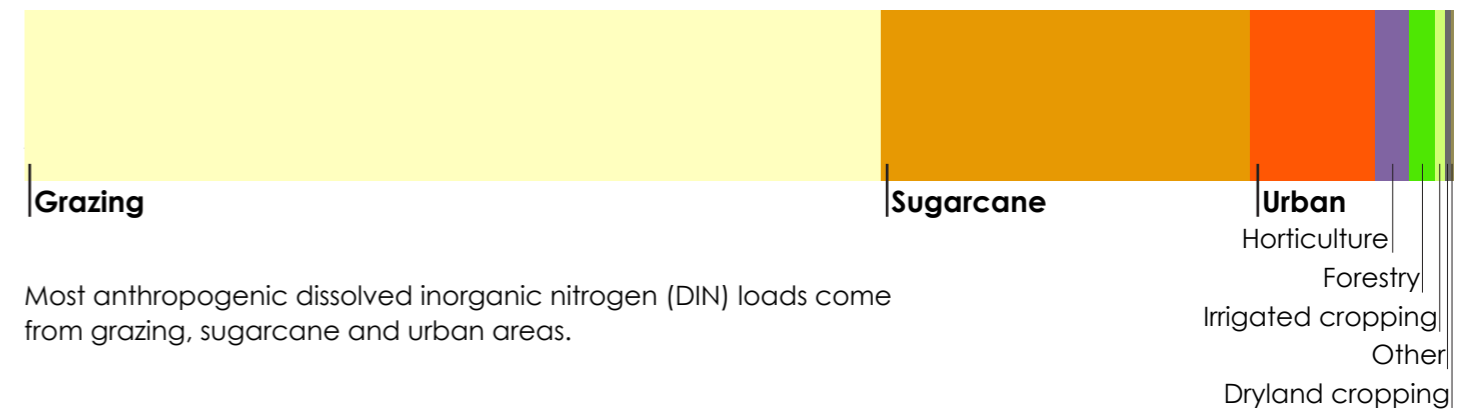
Water quality relative priority



Modelled water quality pollutant loads

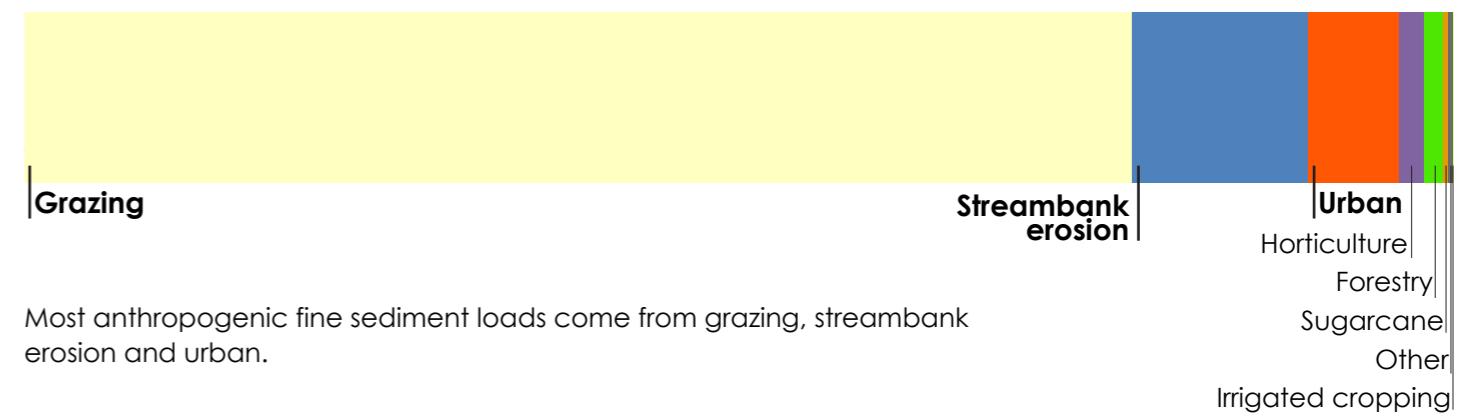
The Baffle catchment has small loads of anthropogenic dissolved inorganic nitrogen and fine sediment, mostly from grazing.

Dissolved inorganic nitrogen



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

Fine sediment



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

Types of sediment erosion



Most sediment erosion comes from hillslopes and gullies in the Baffle catchment.



Australian Government



Queensland Government