BURDEKIN REGION

Ross catchment water quality targets

Catchment profile

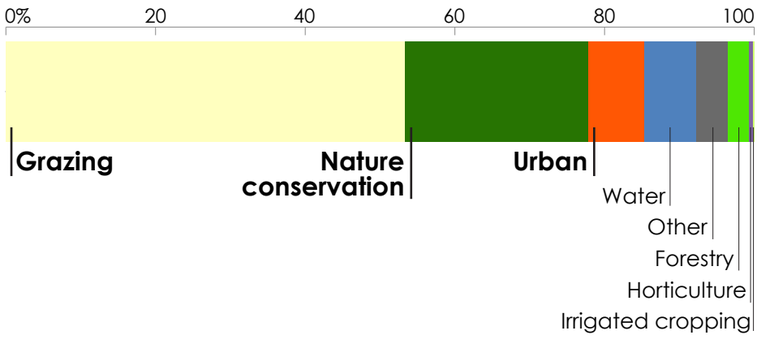
Under the Reef 2050 Water Quality Improvement Plan, water quality targets have been set for each catchment that drains to the Great Barrier Reef. These targets (given over the page) consider land use and pollutant loads from each catchment.

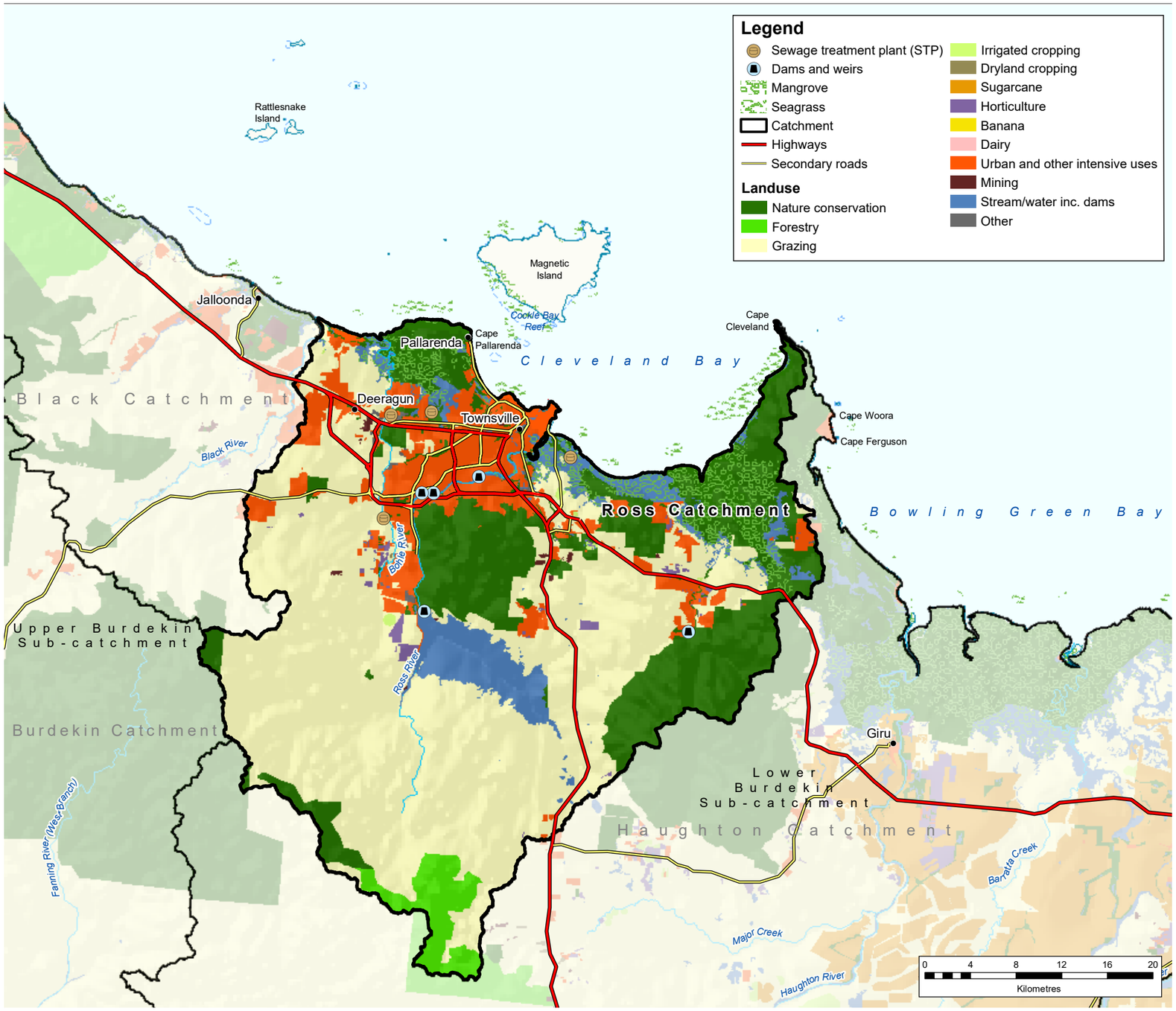
The Ross catchment covers 1707 km^2 (1% of the Burdekin region). Rainfall averages 1124 mm a year, which results in river discharges to the coast of about 543 GL each year.

The Ross catchment sits in the Townsville coastal plain on the southern side of the city of Townsville. The Ross River is the major waterway that drains the western section of the catchment area. The upper reaches of the Ross River are dominated by grazing and flow into Lake Ross. The lower reaches of the Ross River are dominated by urban and conservation/minimal use areas. Alligator and Crocodile creeks are the major waterways in the southern section of the Ross catchment, which comprises mostly grazing and conservation/minimal use.

Land uses in the Ross catchment

The main land uses are grazing (53%), nature conservation (25%), and urban (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)	Pesticides
60% 74 tonnes	**Not determined**	**Not determined**	**Not determined**	To protect at least **99%** of aquatic species at the end of catchment

Targets were not determined for fine sediment, particulate phosphorus or particulate nitrogen for the Ross catchment due to a lack of available information.

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.

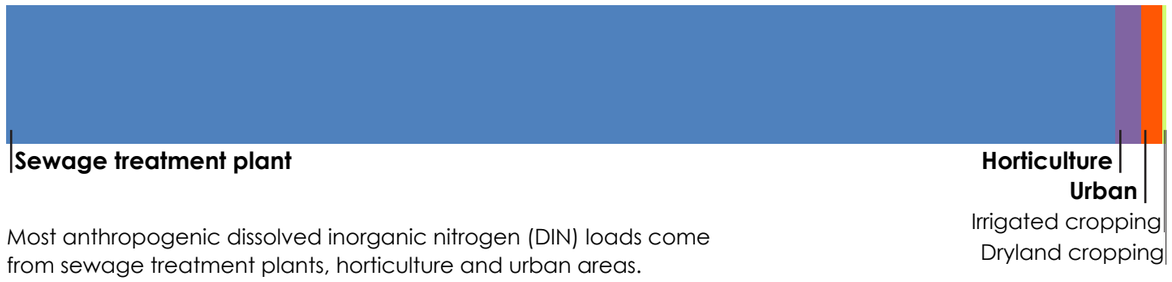
Water quality relative priority

- Very high
- High
- Moderate
- Low
- Minimal
- Not assessed

Modelled water quality pollutant loads

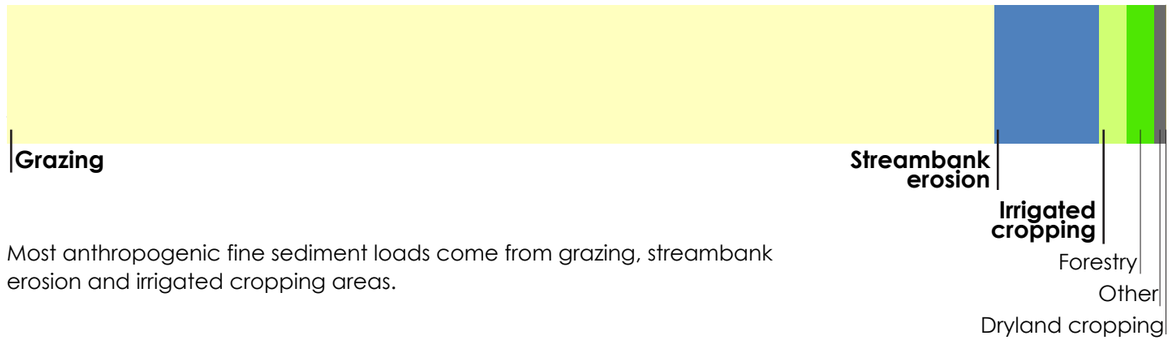
The Ross catchment has a small anthropogenic fine sediment load. The aim is to reduce anthropogenic dissolved inorganic nitrogen loads, which come mostly from the sewage treatment plant.

Dissolved inorganic nitrogen



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

Fine sediment



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

Types of sediment erosion

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