BURDEKIN REGION Haughton 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 Haughton catchment covers 4051 km² (3% of the Burdekin region). Rainfall averages 953 mm a year, which results in river discharges to the coast of about 1216 GL each year.

The Haughton catchment lies centrally along the coastal edge of the Burdekin region. The catchment is flanked by mountain ranges on its western border where the upper reaches of the main sub-catchments start. Grazing is the principal land use in the western section of the catchment area with sugarcane dominating as the primary land use in the floodplains in the lower reaches. The main waterway is the Haughton River in the north of the catchment, with Barratta Creek and a number of other small creeks sitting just to the south. The coastal fringe of the catchment is occupied by Bowling Green Bay, a vast area of internationally recognised (Ramsar) wetlands.

Legend Sewage treatment plant (STP) Sugar mill Dams and weirs Se Mangrove Rattle Island Seagrass Catchment Highways — Secondary roads Landuse Nature conservation Cape Forestry Black eeradur Ca c h m е **Haughton Catchment** Bu**n**deki SIL catchm Sub Clar Mina Burdekin b-catchment Sub East Burdekin Sub-catchment Catchmen Burldekin

Land uses in the Haughton catchment

The main land uses are grazing (58%), sugarcane (18%), and nature conservation (15%).







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% 640 tonnes	maintain current load	maintain current load	maintain current load	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. Where there are minimal anthropogenic pollutant loads, the aim is to maintain current water quality so there are no increases in loads. 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



Modelled water quality pollutant loads

The Haughton catchment contributes the largest anthropogenic dissolved inorganic nitrogen loads in the Burdekin region, mostly from sugarcane. This catchment is one of the five highest contributors of dissolved inorganic nitrogen of the 35 catchments that drain to the Great Barrier Reef. The Haughton has minimal anthropogenic loads of fine sediment.

Dissolved inorganic nitrogen



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



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Australian Government



Queensland Government

Sewage treatment plant | Horticulture | Grazing

Irrigated cropping Urban Dryland cropping