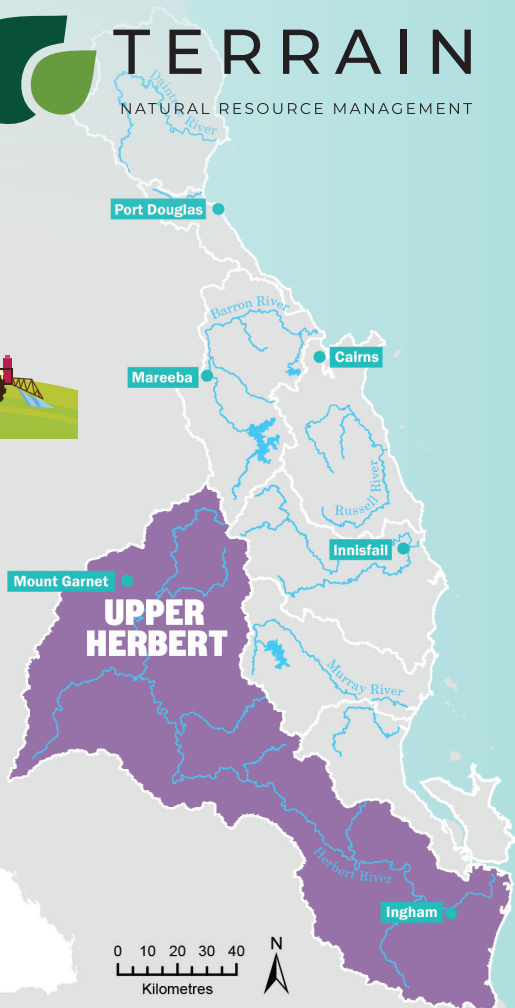


UPPER HERBERT WATER QUALITY PROGRAM

The Upper Herbert Water Quality Program aims to prevent 4,082 tonnes of fine sediment from leaving the catchment and entering the Great Barrier Reef each year

The Herbert River catchment covers an area of around 10,000 square kilometres and is one of the four main contributors to fine sediment loads within the inner lagoon of the Great Barrier Reef. The Herbert catchment extends 288 kilometres from the Atherton Tablelands to the coast at Ingham, north of Townsville. The Herbert River is the largest in the Wet Tropics, with the upper catchment dominated by grazing and the lower sections by sugarcane cultivation.

The 3-year \$3.4 million program is implemented by Terrain NRM and aims to improve water quality through on-site gully remediation, streambank remediation and grazing management practice change. This program is employing a range of measures to reduce fine sediment losses from the Herbert region, including constructing rock chutes to address gully erosion, installation of pile-fields, infill and reshaping/battering of streambanks, revegetation and hillslope or sheet erosion grazing management practice change. The project focus is on land condition improvement, enhanced understanding of soil and grassland systems, and rotational grazing methodologies.



GRAZIER SPOTLIGHT

WOODLEIGH CATTLE STATION

The Great Barrier Reef is a long way from Woodleigh Station in the Mt Garnet region – but the world’s largest collection of coral reefs is benefitting from the Waddell family’s work with Terrain NRM to repair eroded gullies and keep topsoil on Woodleigh Cattle Station.

A 40-metre rock chute with an accompanying 500 metres of bund walls is stopping the spread of a gully complex that is now several hundred metres long. The structure is expected to save almost 200 tonnes of fine sediment from reaching the Great Barrier Reef each year and, just as importantly, prevent the loss of more productive land to erosion.

The rock chute is the first engineered structure for a project that’s heavily focused on grazing management practice changes. Woodleigh Cattle Station’s Kate Waddell says the combination is working well on her family’s property.

“Even with good grass cover and light stocking rates, some of our soil types erode easily during heavy rainfall so there has been quite a bit of erosion over the years,” she said. “It’s important to keep our soil on the property – it’s our lifeblood.”

Terrain NRM’s Jen Mackenzie said the new rock chute was slowing water and channelling it into a nearby creek. “This is an area with historical erosion that’s several hundred metres from a creek and getting worse over time,” she said. “The chute was built in the worst of a series of gully heads. When it rains, the bund walls now channel all the water into the chute, and on into a pre-existing channel to the creek.”

The on-ground works follow a series of workshops for graziers in the Upper Herbert region on healthy grazing ecosystems, managing cattle to create healthy pastures and reducing erosion by better understanding the way water moves across the land. The potential outcomes are improved grassland ecosystems, improved cattle and production and, with the reduction in fine sediment flowing down the Herbert River, improved conditions in the Great Barrier Reef lagoon.

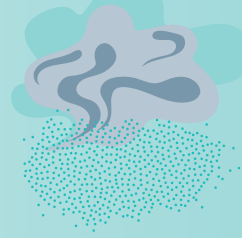
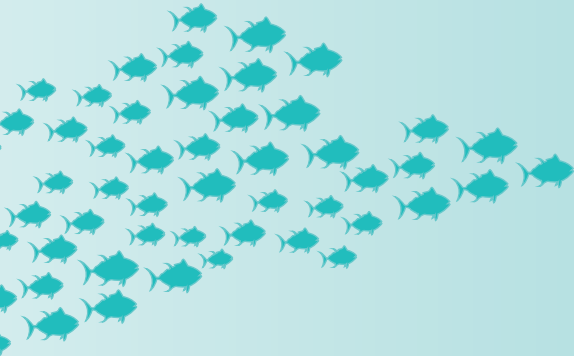


The Upper Herbert Water Quality Program is funded by the partnership between the Australian Government’s Reef Trust and the Great Barrier Reef Foundation.

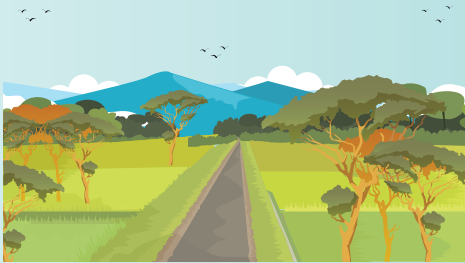
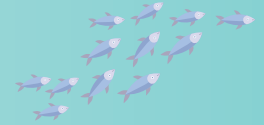
UPPER HERBERT WATER QUALITY PROGRAM



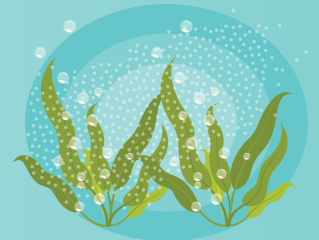
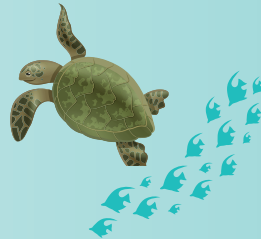
Gully erosion, streambank erosion and hillslope erosion are all contributing factors to sediment loss in the Upper Herbert catchment



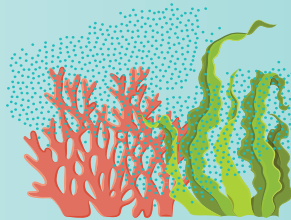
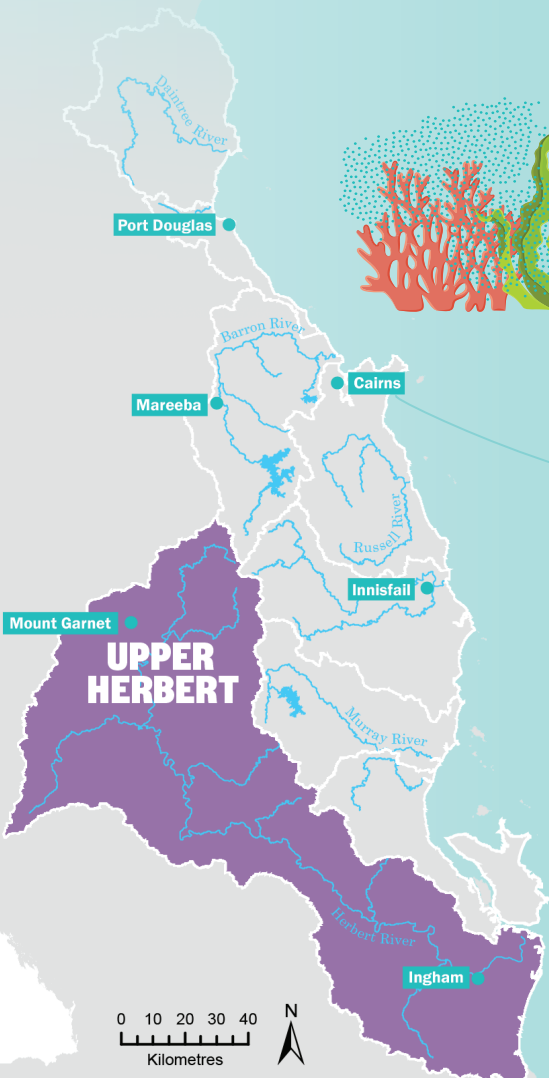
Reducing sediment also reduces the transport of phosphorous and dissolved inorganic nitrogen, other pollutants that harm Reef ecosystems



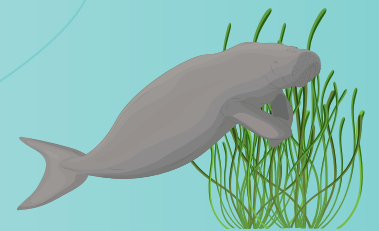
The Herbert catchment is a top-four priority catchment for sediment reduction in Queensland's Great Barrier Reef zone



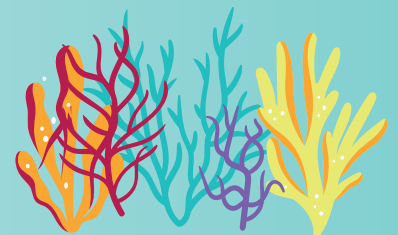
Fine sediment is one of the major pollutants affecting the Reef



Fine sediment smothers corals and seagrasses, blocking the natural light they need to survive



Pollutants reduce the Great Barrier Reef's ability to recover from catastrophic events such as tropical cyclones and mass coral bleaching



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