



## Cattle station's drive to improve the land and Great Barrier Reef

**New grazing management practices and erosion repair work have improved the land on century-old Woodleigh Cattle Station – and stopped hundreds of tonnes of fine sediment from flowing to the Great Barrier Reef each year.**

The Waddell family, who are fifth-generation graziers, wanted to stop the loss of topsoil in heavy rain events, repair extensive gullies and fix eroding tailings dams from historical alluvial tin mining operations on their property near Mt Garnet.

Through Terrain NRM's Herbert River Gully and Grazing Program, funded via the Australian Government's Reef Trust IV program, they embarked on a major project including earthworks, revegetation, fencing, off-stream watering points and a new cattle/

land management regime based on natural grazing practices.

### **EROSION REMEDIATION WORK**

Engineers designed a 100m-long rock chute to divert water from an eroded gully between the Herbert River catchment and a large dam system on the Waddell's property. Three smaller rock chutes, with bund walls, were also constructed in eroded areas.

Wall breaches were repaired on abandoned tailings dams.

Rock chutes and alternative flow paths were created so dams could function as sediment traps again and could also transition to wetlands.

### **CHANGES TO GRAZING MANAGEMENT PRACTICES**

The Waddells already had low to optimum cattle stocking rates on their 42,000-acre property, ensuring good ground cover at the end of the dry season. And with the introduction of wet season spelling (fallow paddocks) they had seen improvements in grasses and soil

# HERBERT GULLY & GRAZING PROJECT



biology over a 10-year period. Their challenges included some soil types that erode easily during heavy rain events.

Through the project, they added 13km of fences to downsize paddocks for a seven-paddock 'Grazing Naturally' system, where 900 head of cattle are moved in one herd, smaller paddocks are grazed for shorter, more intense periods and each paddock has a one-year spell. In addition, waterways were fenced off and alternative water sources provided.

*"We are doing this to improve our topsoil depth and soil-water-holding capacity, to enable even grazing of our pastures and to leave the land in a healthy state for future generations."* – **Kate Waddell, Woodleigh Station**

*"I can see big impacts in some of the country already. We've had a couple of really good seasons but I don't think we've ever had as much quality feed as in the last couple of years. The herd seems a lot healthier too – they are carrying more condition and we put that down to the improved quality of feed. Feed is staying fresher longer, probably because more moisture is being retained in the land."*

– **Pete Waddell, Woodleigh Station**



## RESULTS

Every year these erosion remediation structures are together stopping more than 800 tonnes – or 30 truckloads – of fine sediment from flowing into the Herbert River catchment and out to the Great Barrier Reef lagoon.

Much greater gains are expected in the long-term from the changes to grazing management practices. These changes are expected to significantly reduce sheet erosion.

*"With the new grazing system, the cattle are stimulating native grasses, keeping soil cover and allowing more water capture and that's a better outcome for the whole eco-system."*

– **Dick Richardson, Grazing Naturally**

## ABOUT THE HERBERT GULLY AND GRAZING PROGRAM

This is a five-year program delivered by Terrain NRM in partnership with landholders. A number of properties, including Woodleigh Cattle Station, will become models for future projects across the Great Barrier Reef catchment. The Herbert Gully and Grazing Program also provides workshops for graziers right across the Wet Tropics region on natural grazing practices, including information on soil health and its link to pasture management.

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