

Tunnel erosion control on Coolangatta Mountain, Berry

Location: Berry, NSW

NRM Region: Southern Rivers CMA

Industry: Beef farming

Issues:

- Nutrient and sediment runoff
- Tunnel erosion
- Water quality of farm dam and Shoalhaven River catchment.

Landholder Vision:

- To sustainably manage the land to the best of our ability and achieve a balance between productivity and conservation

Funding:

- The Australian Government Envirofund is the local action component of the Australian Government's \$3 billion Natural Heritage Trust.



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Small Farms and Rural Living Network

Southern Councils Group

The Project

This project treated two areas of active tunnel erosion (0.22ha in size) at the foothill of Coolangatta Mountain. The project was planned and completed by the Department of Lands, Nowra in 2007.

Area1: Tunnel Erosion – 1,000m²

Located in the flow line catchment of the main farm dam.

The gully was ripped and backfilled with gypsum and soil. A diversion bank was constructed to protect the area, before it was sown with grass seed and fertiliser. The site was then fenced (50m x 20m wide) and planted with local tubestock.

Area 2: Tunnel & Batter Erosion – 1,200m²

Bank tunnelled and channelling water down gully head into neighbouring property. The batter was repaired, the area ripped and shaped, mulch, gypsum and lime spread across site and sown with grass seed and fertiliser. The site was then fenced (60m x 20m wide) and planted with local tubestock.

This project will assist in filtering agricultural nutrients and sediment from entering the Broughton Creek / Shoalhaven River estuary system which has an extensive oyster industry and relies on good water quality.

Planting and Results

Excellent 2007 spring and summer rain assisted with revegetation efforts. However, good rain and soil disturbance resulted in significant weed growth. The landholders have cut back the weeds and seeded the site again with 2008 autumn rains to help out compete new emerging weeds.

An extra 130m of fencing was constructed above gully 1. Extra planting is planned for spring 2008, to further reduce the velocity of water entering the gully.

Over 200 *Lomandra longifolia* (Mat Rush) tubestock was planted in the gully areas, however this was under estimated by the Project Officer as literally a 1,000 of them could have been established to stabilise the soil along with other planted native species.

Despite these issues, the tubestock have established well and the two project sites have stabilised and are being monitored by the Department of Lands and the landholders.

Additional Projects: Shelterbelt / Wildlife Corridors

Revegetation of the two gully sites has created linked wildlife corridors with established western and eastern boundary shelterbelts (total 1km in length) and Coolangatta Mountain. Envirofund funded the western shelterbelt in 2005, and both projects demonstrate "best practice" in establishment and management practices.

More Details

For more details about this project or to plan your own revegetation project, contact Andrew Britton, Small Farms Coordinator on (02) 4232 3200 or email abritton@southerncouncils.nsw.gov.au



Department of Lands undertaking remedial works on gully 1, which feeds into the farms main dam for livestock.



Gully 1. Revegetation of the gully has been difficult due to secondary weeds emerging.