

## WTL - BC 5: Reducing Gully Erosion in Grazing Lands in the Upper Barron Catchment

Identify and repair areas of gully erosion on grazing properties in the Upper Barron Catchment to reduce sediment runoff and improve water quality.

This strategy delivers on these Regional Themes	Biodiversity	Biosecurity	Coastal Systems	Sustainable Industries	Water
	✓			✓	✓
This strategy delivers on these Strategic Outcomes	Supportive, policies, plans and regulations	Collaborative, adaptive planning and action	Traditional Owner Benefits	Sustained and diverse resourcing	Community stewardship, values and action
		✓			✓
Outcome	<p>Conducting gully repair activities in areas of high erosion on grazing properties within the Upper Barron Catchment will result in:</p> <ul style="list-style-type: none"> <li>▪ Identification and repair of erosion hotspots.</li> <li>▪ Reductions in sediment sand nutrient run-off with associated improvements in water quality downstream in the Barron River and the Great Barrier Reef.</li> <li>▪ Improved management and health of riparian areas.</li> <li>▪ Improved management of pasture lands and grazing enterprises.</li> <li>▪ Improved aquatic habitat for a range of species.</li> <li>▪ Opportunities to engage with local communities and increase involvement in the project.</li> </ul>				
Justification	<p>Sediment runoff from gully erosion has a high impact on the health of the region's waterways, with areas of high erosion contributing significant sediment and nutrient loads to creeks and rivers. Significantly, a range of health problems on the Great Barrier Reef have been linked to land-based sediment and nutrient runoff. Soil conservation in this area is a priority due to the fast runoff, erodibility of soil and fine sediment. There are also areas of major gully erosion in steeper areas and waterways which have minimal riparian vegetation remaining, increasing their instability. There are a range of effective techniques which could be used to stabilise these areas and reduce the impacts of erosion. Reducing sediment loss through remediation of gully erosion will make a significant difference.</p>				
Key steps	<ol style="list-style-type: none"> <li>1) Using existing information and mapping, identify areas which are contributing significant sediment loads to waterways.</li> <li>2) Conduct extensive communication and consultation with local communities and landholders regarding the project, to ensure good community support and stewardship.</li> <li>3) Collaboratively develop and implement project to minimise loss of topsoil and stabilise high erosion sites, using a range of best-practice approaches, including community and technical expertise.</li> <li>4) Monitor results and maintain projects sites to ensure continuing effectiveness.</li> <li>5) Showcase completed sites.</li> </ol>				
Feasibility considerations	<ul style="list-style-type: none"> <li>✓ Some landholders are already engaged and keen to proceed with further work.</li> <li>✓ Landholders have a good relationship with DAF, therefore good to partner with them.</li> <li>✓ There are other catchments in the region with similar issues and solutions which we can learn from.</li> <li>✓ There are opportunities for collaboration among landholders and establishment of farmer clusters to work on erosion and sediment issues.</li> <li>✗ A range of techniques may be required, including engineering solutions or revegetation, and the financial cost in some areas may be relatively high.</li> <li>✗ No plans developed in this area.</li> <li>✗ Cost of engineering and fixing gully erosion is expensive.</li> </ul>				