

WTL-MSN 4: BMP to Reduce Erosion in Cassowary Creek

Assist farmers to identify and implement BMP in the Cassowary Creek sub-catchment to reduce sediment entering waterways.

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| 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 |
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| Outcome | <p>Reducing current levels of sediment entering the system will:</p> <ul style="list-style-type: none"> ▪ Improve overall water quality and reef health in region. ▪ Reduce the amount of land being lost to erosive effects. ▪ Increase productive land for farmers to utilise for cropping. ▪ Increase efficiencies and reduce environmental impacts. | | | | |
| Justification | <p>Cassowary Creek catchment consists of a mosaic of cane and cattle farms managed by about half a dozen families who have been on the land in this valley for many generations. The native riparian vegetation has been largely cleared in the past 150 years resulting in wide spread erosive processes during high rainfall events. The system is very flashy, the creek is ephemeral and during the wet season there can be up to 500mm rainfall in a 24 hour period. The catchment is highly susceptible to high run off and erosion.</p> <p>As the valley is managed by a small number of landowners they could be easily galvanised to act on a catchment scale to address the issue of sediment loads entering the system. The main action in regards to the remediation of this valley would be hard works in the form of groyne and bank stabilisation and soft works in the form of rehabilitation of stream banks using native vegetation. This in turn would reduce the amount of sediment entering the Great Barrier Reef basin, improve water quality and finally increase biodiversity and connectivity outcomes along the river banks.</p> | | | | |
| Key steps | <ol style="list-style-type: none"> 1) Identify key landowners in the Cassowary Creek sub-catchments affected by erosion. 2) Invite experts in the field of erosive processes to workshop issues and devise work plans with the aim of reducing the issue. 3) Identify funding opportunities to assist financially with the works required. 4) Support landowners to apply for grant funding or other funding opportunities. 5) Assess the change in condition of country to evaluate the effectiveness of the works. 6) Encourage BMP on farm to increase overall efficiencies and reduce environmental impacts. | | | | |
| Feasibility considerations | <ul style="list-style-type: none"> ✓ Strong capacity and expertise from within Terrain NRM. ✓ Potential to work with other Terrain projects to value add to the overall outcomes for water quality and reef. ✓ Increase outcomes by engaging farmers in BMP and innovative practices. Connect farmers with Terrain's Landcare Facilitator and other industry experts. ✓ Strong industry support – Canegrowers and Mossman Agricultural Services. ✓ Strong landowner support – cane and cattle farmers ✗ Landowners perception of Government not being supportive or restrictive of riverine works. ✗ Very expensive to undertake hard works – will require funding to facilitate meaningful and long term outcomes. | | | | |