

## R-CM 16: Reducing Erosion and Improving Drainage

Stabilise areas of significant erosion in the landscape, such as around waterways and agricultural drains, using a range of techniques eg. revegetation, maintaining effective farm drains and installing detention basins.

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>Reducing erosion and improving drainage can provide positive outcomes in a range of areas, including:</p> <ul style="list-style-type: none"> <li>▪ Reducing sediment and nutrient runoff into waterways, contributing to improved water quality and aquatic environments.</li> <li>▪ Reducing loss of valuable topsoil from farms.</li> <li>▪ Improving landscape connectivity and wildlife habitat.</li> <li>▪ Improving infiltration into groundwater aquifers.</li> <li>▪ Providing shade and shelter for stock through revegetation.</li> <li>▪ Reducing weed harbour areas on farms by improving management of grasses and weeds in farm drains.</li> </ul>
Justification	<p>Sediment runoff from terrestrial activities has a high impact on the health of the region's waterways. Significantly, a range of health problems on the Great Barrier Reef have been linked to land-based sediment and nutrient runoff. Areas of high erosion contribute significant sediment and nutrient loads to the region's waterways. There are a range of effective techniques which could be used to stabilise these areas and reduce the impacts of erosion, as well as contribute to other environmental benefits. Revegetation of unstable areas can bring added benefits to wildlife and connectivity, as well as providing shade and shelter for stock.</p>
Key steps	<ol style="list-style-type: none"> <li>1) Using existing information and mapping, identify areas of high erosion which are contributing significant sediment loads to waterways.</li> <li>2) Where gaps are identified, conduct research into additional high priority locations.</li> <li>3) Conduct extensive communication and consultation with local communities and Traditional Owners regarding the project, to ensure good community support and stewardship.</li> <li>4) Collaboratively develop and implement projects to stabilise high erosion sites, using a range of best-practice approaches and including community and technical expertise.</li> <li>5) Monitor results and maintain project sites to ensure continuing effectiveness.</li> </ol>
Feasibility considerations	<ul style="list-style-type: none"> <li>✓ Some groups have already implemented successful projects to stabilise erosion prone areas and reduce sediment runoff; these approaches and techniques can be applied in other locations.</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>✗ Ongoing maintenance may be required in some areas to ensure effectiveness eg. Removing silt from detention basins, mowing grasses in farm drains.</li> </ul>

Local Landscape Projects	Local Landscape Project	Location
	ST8 Green Farm Drains	Spring Ck, Hallorans Hill
	ST10 Revegetation to Reduce Erosion	Upper Barron
	CN16 Green Cane Drains	Agricultural drains, Cairns area
	NC6 Rural Road Sealing to Reduce Runoff	Cassowary Coast