

## WTL-RC 1: Fluvial Assessment for Targeted Remediation Options – Mid-Russell River

Conduct a fluvial assessment of the mid-Russell River to improve understanding of avulsion risk and erosion and identify options for remediation.

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 a fluvial assessment of this section of the Russell River will result in:</p> <ul style="list-style-type: none"> <li>▪ A better understanding of the issues and priority areas to focus on.</li> <li>▪ An opportunity to identify and conduct targeted and strategic remediation projects.</li> <li>▪ A focus for investment options which will provide the most significant return on financial inputs.</li> </ul>				
Justification	<p>A solid understanding of the river dynamics in this reach needs to be established before identification of remediation options can occur eg. hardening or not. Inappropriate remediation can make existing problems worse or move them to new areas. There is some evidence of river perching in this reach of the Russell River, leading to a greater risk of avulsion and bank erosion. A river breakout through the Babinda Swamp Drainage network would have major consequences for agriculture, infrastructure and water quality.</p>				
Key steps	<ol style="list-style-type: none"> <li>1) Develop the terms of reference in collaboration with catchment partners, including the Cairns River Improvement Trust, DNRM and the Babinda Swamp Drainage Board.</li> <li>2) Investigate collaborative funding options - there may be some potential through the RIT works program.</li> <li>3) Maintain existing partnerships in this area (Council, RIT, DNRM, landholders) to manage the project and ensure strong stakeholder support.</li> <li>4) On completion of the fluvial assessment, progress to identification and implementation of priority remediation actions.</li> </ol>				
Feasibility considerations	<ul style="list-style-type: none"> <li>✓ There are already some existing networks and partnerships formed to investigate and manage the issues in this reach of the river.</li> <li>✓ There is good community support to progress work in this area and minimise the risk of avulsion, erosion and breakout of the river.</li> <li>✗ The remediation process for this section of the river will be complex and will require a wide range of technical expertise.</li> <li>✗ Remediation options identified may be expensive.</li> <li>✗ The risk of a river breakout will have significant impacts on farming systems, communities, infrastructure and water quality.</li> </ul>				