

WTL-JC 1: Improved Water Quality in the North Johnstone River

Implement a whole of system approach to improve water quality and waterway management in the Vasa Views / Daradgee area, integrating best-management drainage systems, construction and reinstatement of wetlands and improved farm management systems.

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>Implementing a whole of system approach to waterway management in the northern section of the Johnstone River Catchment will bring multiple benefits, including:</p> <ul style="list-style-type: none"> ▪ Improved water quality in wetlands, waterways, in-shore lagoons and coastal and reef systems, including reduced sediment, pesticide and herbicide loads. ▪ Improved adaptability and resilience of our region’s waterways and coastal systems to impacts of climate change. ▪ Increased habitat and connectivity, benefiting a range of aquatic species. ▪ Increased community awareness and stewardship of waterways projects. ▪ Increased recreational and tourism opportunities around waterways. 				
Justification	<p>This area provides much of the northern inflow into the Johnstone River and has been identified as a hot spot for DIN. Reducing the nutrient and sediment loads within the Vasa Views / Daradgee area will have significant positive impacts on the freshwater and coastal systems of the North Johnstone Catchment. Some landholders have already been engaged and have indicated a willingness to proceed with further on-ground work and farm practice adjustments. The mixed land uses within the catchment require a systematic approach, which incorporates reduction of nutrient and sediment inputs, improvements to the management of drainage systems and construction / reinstatement of wetlands to provide the best results.</p>				
Key steps	<ol style="list-style-type: none"> 1) Consult with the community and source appropriate local and technical expertise to clearly identify and prioritise locations for on-ground work and develop programs for implementation. 2) Identify and engage with relevant landholders in priority locations for on-ground work (eg. reinstatement of wetlands at confluence of Fitzgerald / Stones Creeks and the Johnstone River). 3) Engage with all landholders and provide support, including information, advice and funding opportunities, to improve management of drainage systems and farming practices to improve water quality. 4) Develop and implement a monitoring program to assess the environmental and capacity building outcomes. 				
Feasibility considerations	<ul style="list-style-type: none"> ✓ The area is relatively contained, providing an opportunity to implement a whole-system approach and conduct effective monitoring of the impact of on-ground work. ✓ Some landholders are already engaged in the process. ✓ There are good hydrological connections within the system. ✗ For a systems approach to be successful, it will require the support of most landholders within the area. ✗ The system has been heavily modified and drained for agriculture; some areas will require significant and expensive intervention to achieve good outcomes. ✗ Waterway projects can present difficulties for on-ground work, including poor access, steep, uneven terrain, risk of flooding and crocodiles. 				