

2014 water quality IMPROVEMENT PLAN

Sandy Creek Management Area Progress Report

Summary of progress

Sandy Creek catchment is a coastal drainage system, located on the southern Pioneer River floodplain. Sandy Creek originates south of the township of Mirani, flowing south-east before heading east, entering the sea at Sandringham Bay. The catchment is largely dominated by intensive agriculture with more than 50% of the landuse supporting cane production and 40% grazing activity. Teemurra Dam in the west of the catchment regulates flow and supplies irrigation to downstream areas.

In 2007, the ecological condition of Sandy Creek and Sandy Creek estuary were rated as amongst the poorest in the Mackay Whitsunday region. Between 2007 and 2013, there have been excellent efforts from the agricultural production community to improve water quality management on farms. As a result the water quality of Sandy Creek has seen some improvements. Many cane growers in the Sandy Creek catchment are also leading innovative activities for water quality benefits.



"We value interaction and communication with like-minded innovative growers."

Sandy Creek farmers and community leaders, David and Tina Ellwood

Agriculture implementation highlights

- More than 150 cane and horticulture farmers have improved the management of soil, nutrients and herbicides on more than 66% of the intensive cropping land with Reef Rescue support
- Fifteen graziers have improved pasture management on more than 314 ha of pasture with Reef Rescue support
- Artificial wetlands and sediment detention basins have been constructed on three cane properties to manage water quality

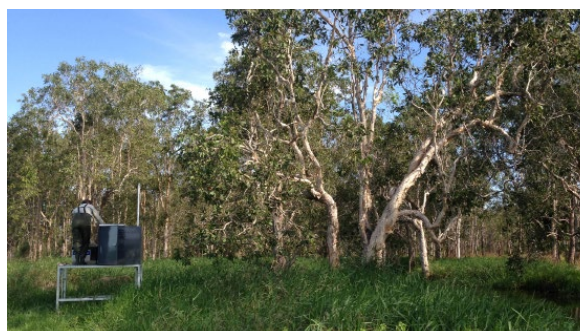
Ecosystem implementation highlights

- Wetland restoration and water quality management has been undertaken over 10 ha at DeMoleys Lagoon
- Riparian management has been improved along more than 25 km of Sandy Creek by graziers who have installed riparian fencing and off-stream watering points
- A critical barrier to fish migration has been removed with the construction of a rock ramp fishway

Future priorities

Grazing and cane management practices that reduce phosphorus loads are the highest priority for continued improvement of water quality. As marine risk exposure from pesticide and nutrient loads is rated as high in the near shore environments of this catchment, it is a priority that management practices are implemented to reduce diuron and other nutrients and residual herbicides.

All system repair actions that improve fish habitat and species diversity and abundance are critical to improve the poor ecological health rating for Sandy Creek catchment area. Riparian vegetation restoration and connectivity is also a high priority to stabilise stream bed and banks for improved water quality. Prioritisation and investment in mangrove and saltmarsh rehabilitation is crucial to halt degradation and initiate recovery of these coastal systems and reduce marine risk exposure.



Auto samplers at the DeMoleys Lagoon will help monitor changes in water quality as on-ground activities contribute to improvement in ecosystem health.