

2014 water quality IMPROVEMENT PLAN

Bakers Creek

Management Area Progress Report

Summary of progress

The Bakers Creek catchment area drains the coastal floodplain surrounding the township of Walkerston. Bakers Creek flows eastward, entering the sea at Sandringham Bay. The catchment landscape is an expansive flat floodplain traversed by irrigation and drainage channels that have modified natural flow to provide water to farms. While the riparian vegetation in the upper catchment has been extensively cleared, the lower reaches have maintained moderate riparian condition and extent.

In 2007, the ecological condition of the Bakers Creek catchment area was rated as amongst the poorest in the Mackay Whitsunday region. Between 2007 and 2013, there has been considerable efforts by agriculture and industry to improve management practices for water quality benefits.



"I am looking ahead and trying to progress what we always do to be a better farmer."

Tony Bugeja, Bakers Creek Project Catalyst sugar cane farmer

Ecosystem implementation highlights

- Riparian management improved along more than 3 km of Bakers Creek by graziers who have installed riparian fencing and off-stream watering points with Reef Rescue support
- Construction of a rock-ramp fishway removed a critical barrier to fish migration

Agriculture implementation highlights

- More than 100 farmers have improved management of soil, nutrients and herbicides on cropping land with Reef Rescue support
- 4 graziers have improved pasture management on more than 200 ha with Reef Rescue support
- Artificial wetlands and sediment detention basins have been constructed on 2 cane properties to manage water quality

Future priorities

To ensure ongoing improvement of water quality the reduction in particulate and filterable reactive phosphorus remain the highest priority in the Bakers Creek catchment area. With marine risk exposure from pesticide and nutrient loads rated as high in the near shore environments to the estuary, management practices that reduce other nutrients and residual herbicides, particularly diuron, are also a high priority.

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



John Deguara's tractor with GPS roof array and front tank carrying shielded sprayer. The GPS variable rate control unit delivers precision nutrient and chemical applications to improve efficiency and accuracy of operation.