

2014 water quality IMPROVEMENT PLAN

Reliance Creek

Management Area Progress Report

Summary of progress

The Reliance Creek catchment area is just north of Mackay City sharing a catchment boundary at Shoal Point. Landuse is dominated by intensive cane production on 38% of the catchment and grazing on 32% across the catchment. Reliance Creek wetlands and estuary are protected by Reliance Creek National Park. Historically there have been issues with water quality, fish kills and mangrove die-back.

In 2007, marine risk of exposure was considered high for the waters from the estuary to the High Ecological Value in-shore Green Island and Green Reef. At this time Reliance Creek estuary and freshwater stream condition were also rated as low relative to other Mackay Whitsunday catchment areas. Between 2007 and 2013, there have been efforts by farmers to improve water quality leaving cane and grazing production lands to adjacent wetlands and receiving marine areas that were considered under risk of exposure to the effects of increased nutrient levels. The improved management practice initiatives in cane and grazing provide a solid foundation from which to expand management practice improvement for water quality and ecological health.



Laurence Bonaventura's family farming at Reliance Creek since 1937,

"My father taught me the value of keeping a rainforest buffer between the creek and our cane land to filter and trap fine sediment for water quality"

Ecosystem implementation highlights

- Riparian management has been improved on 16 ha of land by installing more than 8 km of riparian fencing and off-stream watering points with Reef Rescue support
- Reliance Creek and tributaries surveyed for Pond Apple weed infestations with a control program completed across 22 ha

Agriculture implementation highlights

- Almost 50 farmers have improved on-farm management practices for water quality benefits and ecological health across 1500 ha with Reef Rescue support
- Artificial wetlands and sediment detention basins have been constructed on one cane property to manage water quality

Future priorities

Grazing and cane management practices that reduce nitrogen and phosphorus loads are the highest priority for continued improvement of water quality. With marine risk exposure from pesticide and nutrient loads rated as high for the near shore environments, management practices that reduce nutrients and residual herbicides are also a priority.

All system repair actions that improve fish habitat and species diversity and abundance are critical to improve the poor ecological health rating for Reliance Creek. Riparian vegetation restoration and connectivity is a high priority to support fish communities and stabilise stream bed and banks for improved water quality. Prioritisation and investment in mangrove protection and enhancement are also important to manage coastal systems and reduce marine risk exposure.



Pond apple control has been a priority project on Reliance Creek. Riparian revegetation on Leila Creek a key tributary of Reliance Creek, followed up by weed control works.