

# 2014 water quality IMPROVEMENT PLAN

## Alligator Creek Management Area Progress Report

### Summary of progress

Alligator Creek flows east from the Clarke Range towards Sarina, before entering the Great Barrier Reef lagoon at Sandringham Bay. Cane production dominates more than 50% of the catchment with a further 40% of the land use supporting grazing. The Alligator Creek catchment area has experienced a high degree of modification with significant impacts on riparian vegetation, particularly on the coastal plain. The estuary has retained a buffer of riparian and wetland vegetation, however grazing extends to the headland.

In 2007, the relative ecological condition of the Alligator Creek catchment area was rated as one of the poorest in the Mackay Whitsunday region. Alligator Creek estuary was regarded as being in relatively poor condition while the risk to marine water from exposure to reduced water quality was rated as very high for near shore waters. Between 2007 and 2013, there has been excellent efforts by farmers to improve management practices for water quality benefits.



*"We are happy to do our bit to improve the quality of water going towards the coast"*

Annette and Don Boettcher,  
Alligator Creek graziers

### Ecosystem implementation highlights

- Riparian management has been improved along more than 35 ha Alligator Creek by graziers who have installed 6 km of riparian fencing and off-stream watering points with Reef Rescue

### Agriculture implementation highlights

- 80 Alligator Creek farmers have implemented on-farm improved management practices for water quality benefits across more than 50% of the catchment management area
- Artificial wetlands and sediment detention basins have been constructed on 2 cane properties to improve the quality of water leaving the farm

### Future priorities

To ensure ongoing improvement of water quality reductions in dissolved inorganic nitrogen and phosphorus levels remain the highest priority in the Alligator 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 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 ecological health rating of Alligator Creek. Riparian vegetation restoration and connectivity is also a high priority to support fish communities and to stabilise the stream bed and banks for improved water quality.



Reef Rescue helped Alligator Creek cane farmer John Simpson install a front mounted spray rig on his high clearance tractor for improved efficiency and precision application of nutrients and chemicals for best water quality management.