

2014 water quality IMPROVEMENT PLAN

Upper Cattle Creek

Management Area Progress Report

Summary of progress

Upper Cattle Creek is a tributary of the Pioneer River located in the west of the Mackay Whitsunday region. The catchment area receives high annual rainfall in excess of 3000 mm. The highlands in the headwaters of Upper Cattle Creek catchment are heavily timbered with rainforest while the lower reaches are dominated by open woodland. Eungulla National Park protects over 70% of the catchment area on these steep upper slopes. On the alluvial floodplains 14% of the catchment is under cane production, and 13% under grazing. Downstream, Mirani Weir creates a barrier to fish migration for the Upper Cattle Creek flow.

In 2007, the Upper Cattle Creek catchment area was ranked as being in moderate ecological condition relative to other catchments in the Mackay Whitsunday region, although agricultural production has significantly impacted on riparian vegetation extent and condition. However, between 2007 and 2013, there have been excellent efforts with more than 20 farmers in the Upper Cattle Creek catchment area implementing improved management practices for water quality and ecosystem health benefits.



"We bought the land to control what happens to our environment. We've always had a passion for sustainability."

Upper Cattle Creek grazier Rob Burns and his family are proud stewards of their land.

Agriculture implementation highlights

- Cane farmers have improved the management of soil, nutrients and herbicides on more than 1200 ha of the intensive cropping land with Reef Rescue support

Ecosystem implementation highlights

- Riparian management has been improved along 35 km of Upper Cattle Creek by graziers who have installed riparian fencing and off-stream watering points with Reef Rescue support. This represents management practice change from C Class to B Class on around 40 ha of grazing land
- Instream habitat has been restored through the installation of a series of engineered log jams at a priority reach

Future priorities

Planning and management practices that reduce phosphorus and nitrogen loads are the highest priority for improving event water quality in the Upper Cattle Creek catchment area. Management practices that reduce other nutrients and residual herbicides are also a high priority.

Efforts are required to restore condition and connectivity of riparian vegetation for instream habitat and bank stability to reduce sediment entering the stream. Investment is also required to improve downstream fish passage.



Construction of engineered log jams, Sept 2013. Engineered log jams have stabilised an eroding bank on Owens Creek in the Upper Cattle Creek catchment area. The structures provide fish habitat and encourage the development of deeper pools, reduce sediment deposition and improve water quality.