water quality IMPROVEMENT PLAN





Marion Creek

Management Area Progress Report

Summary of progress

Marion Creek flows east from the High Ecological Value highlands of the Clarke Range to enter the Coral Sea in a wide estuary near Yarrawonga Point. Marion Creek catchment is largely dominated by agricultural production with 79% of the area supporting grazing and 13% under cane production.

In 2007, the ecological health of Marion Creek freshwater stream and estuary were rated as moderate relative to other catchments in the Mackay Whitsunday region. Between 2007 and 2013, there has been considerable effort from the local agricultural community to improve management practices that will benefit the water quality of Marion Creek. As a result, some improvement in water quality have been seen. These efforts have established an excellent base for future ecosystem health improvements in the Marion Creek catchment area.

> Marion Creek farmer Trudi MacDonald has seen first hand results on her land from riparian management with Reef Rescue support. "There seems to be a lot less erosion along the creek since we put the riparian fences up. It's been a big help".

Agriculture implementation highlights

Cane farmers have improved management of soil, nutrients and herbicides on more than 79% of the intensive cropping land in the catchment with Reef Rescue support

Ecosystem implementation highlights

- · Riparian management has been improved along 7 km of Marion 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 baffles at a culvert crossing

Future priorities

Grazing management practices that reduce particulate phosphorus loads will continue to be addressed for better event water quality. Management practices that reduce atrazine, hexazinone and diuron loads are also priority for the Marion Creek catchment area.

All system repair actions that support an improvement in fish communities are the highest priority. Future management efforts need to focus on active management and restoration of instream habitat and riparian vegetation. Efforts also need to ensure coastal wetlands and the estuarine areas are managed to improve the estuarine ecological health ratings. This will require efforts where grazing land management activities occur adjacent to remnant wetlands and on coastal headland areas.



The culvert baffle fishway constructed on Marion Creek helping to restore critical fish passage and flow .