

## 2014 water quality IMPROVEMENT PLAN

# Pioneer River Main Channel Management Area Progress Report

## Summary of progress

The headwaters of the Pioneer River Main Channel catchment originate in Crediton State Forest and Eungella National Park from where the river flows east, entering the sea at Mackay. While the headwaters are well forested, the lowland areas have been extensively cleared for intensive agriculture with 50% under cane production and 28% under grazing.

Riparian vegetation removal along the main river channel has been extensive in some reaches, while moderate quality riparian zones have been maintained in other areas. The lower Pioneer has been changed from riverine conditions to mainly weir pool environments through the construction of water infrastructure. Point source pollution from several towns and Mackay City affects the river and estuary.

In 2007, the Pioneer River Main Channel catchment area was rated as being in poor ecological health relative to other Mackay Whitsunday catchments.



*"Reef Rescue made it viable to make changes in a short time & along the way people were there to help on our journey to better farm management."*

Wayne Vickers, Fifth generation  
Pioneer River cane farmer

## Ecosystem implementation highlights

- Riparian management has been improved along more than 36 km of the Pioneer River Main Channel by graziers who have installed riparian fencing and off-stream watering points with Reef Rescue support
- Flow management planning has been improved with bathymetric waterhole mapping for a better understanding of requirements to maintain critical fish habitat

## Agriculture implementation highlights

- More than 160 farmers have improved management of soil, nutrients and herbicides on intensive cropping land in the catchment with Reef Rescue support
- More than 30 graziers have improved pasture management over 1370 ha of pasture with Reef Rescue support

Between 2007 and 2013, there have been considerable effort by the agricultural industry to improve water quality. As a result of these efforts the water quality of Pioneer River Main Channel catchment has seen some improvement. Many cane growers in the catchment are also leading innovative activity for water quality benefits.

## Future priorities

Grazing and cane management practices that reduce particulate phosphorus loads are the highest priority for continued improvement of water quality. Management practices that reduce other nutrients and residual herbicides, particularly diuron, are also a priority.

All system repair actions that enhance fish habitat and passage are critical to improve the poor ecological health rating for Pioneer River. Improving riparian vegetation and connectivity, and bed and bank stability are a high priority in the modified cane production landscape. A significant commitment to manage flows in this regulated system is required to enable fish communities to gain the maximum benefits from the improvement in water quality.



*Pioneer River Main Channel showing intensive production land and rural urban development adjacent to a narrow riparian margin.*