water quality IMPROVEMENT PLAN





Proserpine River Main Channel Management Area Progress Report

Summary of progress

The Proserpine River Main Channel catchment drains an area dominated by grazing, with extensive irrigated cane production on the lowland coastal plain. Urban and industrial impacts from the town of Proserpine place additional pressure on water quality and ecosystem health. Downstream ecological health has also been compromised by channel modification between Proserpine and the estuary. Flow patterns are highly altered by the management of Peter Faust Dam that occupies the headwaters of the Upper Proserpine River catchment area.

In 2007 the freshwater ecological condition of the Proserpine River Main Channel catchment was rated as the poorest in the Mackay Whitsunday region. The estuary was ranked low for ecological condition, however the mangroves and saltmarshes bounding the northern Repulse Bay Dugong Protection Area have maintained good ecological health. Between 2007 and 2013 there have been efforts by the local farmers to improve water quality.

"The incentives program has definitely been beneficial for us. We have moved from bare fallow to legume fallow, which reduces soil movement and has benefits to the crop."

> Proserpine River cane farmer, Greg Bennett

Ecosystem implementation highlights

- Riparian management improved by graziers along 5 ha of riparian land by installing 2 km of riparian fencing and off-stream watering points with Reef Rescue support
- A critical barrier to fish migration removed with the construction of a rock ramp fishway at the Biggs Road culvert

Agriculture implementation highlights

25 farmers have improved on-farm management practices on almost 9,000 ha of Proserpine River Main Channel catchment land with Reef Rescue support

Future priorities

Grazing and sugar cane management practices that reduce dissolved inorganic nitrogen loads are the highest priority for ongoing improvment of water quality. Management practices that reduce other nutrients and residual herbicides, particularly diuron, are also a priority.

All system repair actions that improve fish habitat and passage are critical to improve the poor ecological health rating for the Proserpine River Main Channel catchment. Improving riparian vegetation condition and connectivity and bed and bank stability will enhance habitat potential and protect production land. A significant commitment to manage flows in this regulated system is required to enable fish communities to gain the maximium benefits from the improvement in water quality.



Rock-ramp fishway constructed at the Biggs Road culvert - restoring passage and flow for fish migration through the Propserpine River Main Channel