Improving landscape resilience in the important sugar production area of the Lower Burdekin Delta

Project summary

Proponent: North Queensland Dry Tropics Ltd

Value: $239,330

Project duration: 1 October 2013 – 30 June 2016

Project description

The ‘Improving landscape resilience in the important sugar production area of the Lower Burdekin Delta’ project involves North Queensland Dry Tropics and its project partner, Burdekin Bowen Integrated Floodplain Management Advisory Committee Inc. (BBIFMAC). These groups will work with sugar cane farmers in the Lower Burdekin Delta to improve the condition of priority coastal wetlands that run into the Great Barrier Reef.

Sugar cane farmers will improve their knowledge and understanding of the impacts of farm runoff (both quantity and quality of water) and the linkages between their individual on-farm practices and associated downstream effects. On-ground farm management practice change will be leveraged through the Australian Government-funded Reef Rescue Water Quality Improvement Grants program.

The Lower Burdekin Delta is home to an abundance of high natural values, including the internationally recognised Ramsar wetlands of Bowling Green Bay. While these wetlands provide for the regionally important sugar cane industry, primarily through water for irrigation, changes to landscape hydrology have seen the loss of seasonality in this Dry Tropics Region. A constant supply of water to the wetlands, accompanied with excess nutrients, has seen the proliferation of invasive weed species. These weeds impact on the efficiency of the irrigation delivery system, increase the risk of flooding and lead to the loss of important habitat for migratory birds and other iconic species like Barramundi.

BBIFMAC will be involved in the planning and delivery of the project and has a long history of promoting an integrated, strategic and community-driven approach to the management of natural resources. BBIFMAC has close links with farmers and supports the sustainable development of primary industries and the local economy for the long term benefit of present and future generations.

Project activities to be undertaken by North Queensland Dry Tropics and BBIFMAC will include:

- water quality and water quantity monitoring programs at a local and farm scale
extension activities with sugar cane farmers to minimise the impacts of farm runoff (both quantity and quality of water) and identifying linkages between individual farmers’ on-farm practices and associated downstream effects.

- provision of access to Water Quality Improvement Grants to implement practice change.

**Project outcomes**

**Long-term outcomes (5-10 years)**
- Seasonal drying down or drying out of wetlands in the lower Burdekin beginning to be restored or mimicked. Excess nutrient and pesticide inputs reduced.
- Resilience to weed invasion increased. Weed cover reduced and natural function restored to wetlands adjacent to, and downstream of, participating sugar cane growers.
- Sugar cane growers taking greater responsibility for local wetland and aquifer management and influencing and supporting institutional management change.

**Intermediate outcomes (3-5 years)**
- Project linked to concurrent North Queensland Dry Tropics projects including Reef Rescue, Paddock to Reef and Systems Repair.
- On-ground improvements in land management practice leveraged through Reef Rescue Water Quality Improvement Grants and Extension activities.
- Sugar cane growers managing on-farm water to minimise runoff to adjacent wetlands and waterways and deep drainage loss to aquifers.
- Sugar cane growers developing understanding of the role of excess water and nutrients in facilitating weed dominance of wetlands.

**Further information**

For further information on the ‘Improving landscape resilience in the important sugar production area of the Lower Burdekin Delta’ project, please contact NQ Dry Tropics Ltd.
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