

Best management practice guidelines for riparian and wetland areas on cane farms

The Great Barrier Reef Coastal Wetlands Protection Program Pilot Program was commissioned by the Australian Government to deliver on-ground actions for the sustainable management of 22 priority wetlands in the Great Barrier Reef catchment. The \$2 million program was delivered over two years by a consortium led by Conservation Volunteers Australia and involved partnerships between government, community and landowners to identify and protect these wetlands.

Project summary

A funding opportunity through the Pilot Program allowed WetlandCare Australia to partner with Cangrowers and the Bureau of Sugar Experiment Stations (BSES) to produce some guidelines for best management practice on cane farms. The resulting booklet, *SmartCane riparian and wetland areas on cane farms*, is one of a series on cane production best management practice produced by the BSES.

The project has allowed the information gained on the pilot sites to be incorporated into educational material that will reach all canegrowers within the Great Barrier Reef catchment.

The need for best management practice guidelines

Status of riparian and wetland areas on cane farms

In earlier times, there was only limited understanding of the adverse effects that clearing riparian areas and draining wetlands could have on water quality and biodiversity, and on cane production itself. For example, it was not well understood that removal of riparian vegetation would not necessarily improve paddock and floodwater drainage.

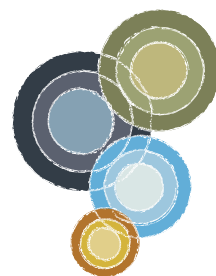
Many cane districts now have greatly reduced riparian and wetland areas as a result of development of most usable and some unusable land for cane growing. Riparian areas have been invaded by exotic grasses and have become subject to dramatic channel widening due to bank undercutting. Stream channels have also become much shallower as the grasses have trapped sediment. Flooding is now more extensive, and floodwaters fail to drain as quickly as they once did.

Progress to date

Canegrowers is actively promoting 'good farm practice' that produces both financial and environmental benefits. Practices that have directly benefited wetland and riparian health include:

- green cane harvesting and trash blanketing
- reduced tillage or minimum tillage systems
- rotation cropping and legume break cropping
- water efficiency, including the reuse of tailwater
- construction of sediment traps that can function as wetlands.

In the wet tropics, in particular, considerable effort is being directed into rehabilitating riparian vegetation to further improve water quality and biodiversity.



About the guidelines

The Canegrowers best management practice guidelines aim to:

- provide the sugar growing industry with standards for sustainable management of riparian lands and wetlands associated with sugarcane production
- promote to landholders the benefits of adopting best management practice in terms of protecting and enhancing wetland biodiversity and water quality, and supporting fishery production
- document examples of improvements in environmental performance, as a result of adopting best management practice, without adverse impacts on farm productivity.

The guidelines focus on water quality, and what can be achieved by active management of the riparian and wetland areas on cane farms. They provide guidance in a broad range of management issues including:

- control of riparian and aquatic weeds
- prevention of streambank erosion and sedimentation
- revegetation
- restoration of former wetlands
- construction of new wetlands
- irrigation and drainage management
- fish habitat and migration
- use of fire and/or grazing in wetlands
- use of herbicides in wetlands
- feral animal control.

Producing the guidelines allowed the experience gained in developing integrated wetland management plans across 20 sites within the Great Barrier Reef catchment to be communicated industry-wide. It also bridged an information gap between previously published technical manuals on riparian and wetland management and the more general best management practice guidelines currently being prepared by BSES for Canegrowers.

Further reading

Smith RJ 2008, Best-Practice: Riparian and Wetland Areas on Sugarcane Farms Canegrowers 'Best Management Practice' Series

Contacts

Canegrowers

Phone: (07) 3864 6444

www.canegrowers.com.au

WetlandCare Australia

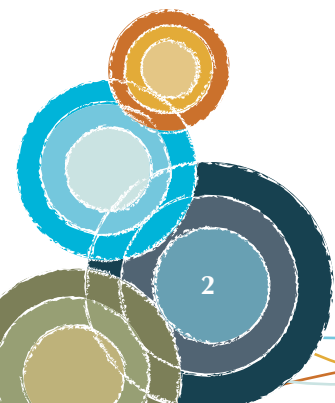
Phone: (02) 6681 6169

www.wetlandcare.com.au

Bureau of Sugar Experiment Stations (BSES)

Phone: (07) 3331 3333

www.bses.org.au



Australian Government