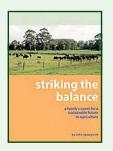
# WILLIAMS RIVER RIPARIAN BEST MANAGEMENT PRACTICE

## **OVERVIEW** of the project

In 1996 the Healthy Rivers Commission identified the Seaham weirpool on the Williams River as a priority site for riparian restoration, to reduce the loss of topsoil, improve biodiversity values and enhance water quality. This project aimed to improve water quality in the river by setting up a demonstration site that trialled a range of bank stabilisation, restoration and farming techniques. These included fencing, planting, weed control, stock watering points, feral animal control and alternative pasture management techniques.

The work was carried out on 'Hilmont', a 145ha beef cattle property with a 3km frontage to the Williams River. The Hilmont demonstration site offers practical solutions that can be replicated by other landholders along the river. The outcomes of the project have been captured in an inspirational booklet and DVD that tells the story of one family's experience in incorporating environmental objectives with business and land management.



The booklet tells the story from the landholder's perspective.

#### how the project was carried out

The Hunter-Central Rivers Catchment Management Authority called for expressions of interest from landholders to make their property available as a demonstration site. After selecting the property a comprehensive examination was carried out of all aspects of the farm impact on water quality, and from this a property plan was developed to address each issue.



Aquatic vegetation re-establishing in a quiet section of the river

Baseline assessments of vegetation, soil and groundwater were carried out. The vegetation assessment identified areas where natural regeneration was possible and areas that required fencing and planting. Soil and groundwater investigations determined potential acid sulfate soils. Water quality, groundwater and birdlife were monitored regularly.

Weeding, regeneration and bank stabilisation works along the river were undertaken by bush regenerators. Whilst most of the river frontage was already fenced, additional fencing and stock watering points were installed to reduce stock access to other waterways and wetlands on the property, and plantings were established away from the river to provide shade for stock.

### **OUTCOMES** now and in the future

A total of 6000 trees were planted during the first two years. The new fencing improved the management of livestock along the river and in sensitive low lying areas of the property. The subdivision of large paddocks into smaller paddocks allowed greater grazing pressure over shorter periods, resulting in faster pasture recovery.

In the long term the riparian zone fencing, plantings and changes in paddock management will improve water quality leaving the farm.

Monitoring of water quality at eight sites across the property has provided the landholder with a new understanding of water management and their farm impacts. The landholder is now more aware of the habitat values of their property and plans to maintain and improve bird habitat on the farm. Over 110 bird species were observed on the property through bimonthly bird surveys carried out by the Hunter Bird Observers Club.

The project involved communicating the various project elements to a wider audience, particularly landholders within the immediate catchment. Over 300 people participated in six field days, each with a particular focus such as pests, weeds and birds. A Landcare Forum attracted another 200 people to the property.

# benefits, challenges & lessons learned

Most of the vegetation trials have been successful, however attempts to establish aquatic vegetation along the river edge to slow erosion rates have had limited success with only plants outside of heavy boating areas surviving to regenerate naturally. Wave action from boating is an ongoing issue that needs to be addressed beyond the property boundary.

Rabbits and foxes are also still present on the property. The landholder has learned that management is required on an ongoing basis, with a mixture of control methods.

The monitoring undertaken during the project was comprehensive, however the water quality monitoring and bird surveys would have benefited from more detailed information prior to commencing the work.



