

Managing riparian land: benefits to croppers

Over the past 20 years, catchment management authorities (CMAs) and government have worked with landholders to manage riparian land. Typical management activities have included fencing, revegetation, provision of off-stream stock watering infrastructure and weed and pest animal management.

Riparian land with native vegetation in good condition is important for waterway health. It provides habitat for plants and animals, improves water quality, stabilises stream banks, supplies food for fish and other in-stream organisms and provides a corridor for the movement of native plants and animals.

This fact sheet presents the direct benefits to croppers from managing riparian land.

What is riparian land?

Land that adjoins rivers, creeks, estuaries, lakes and wetlands is known as riparian land (often called 'frontage'). Riparian land is often the only remaining area of remnant vegetation in the landscape.



Fenced and revegetated reach of Fiery Creek, SW Victoria.
Photo: Glenelg Hopkins CMA

What are the benefits of riparian works to croppers?

On a personal and property scale, managing riparian land has a number of direct benefits to croppers that are supported by sound evidence:

- production benefits e.g. increased crop production
- improved property prices e.g. adding market value from native vegetation
- landholder wellbeing e.g. personal pride and a 'feel good factor'.

Increased crop production

Pollination

About 92% of plants worldwide are pollinated by animals. In about half of these, reproduction is determined more by the numbers of pollinators visiting the plants than by weather, soil fertility, diseases, parasites or animals that eat their flowers¹. In Australia, most crops are pollinated by introduced honey bees².

A study of bees in California showed that proximity to native vegetation enhances pollination services in cropping areas^{3,4}. This is supported by a study from the United Kingdom where riparian margins were found to have richer plant assemblages and supported more pollinators than grassland fields⁵.

Pest control

The presence of a diversity of native vegetation types can assist biological control of non-beneficial insects in crops by birds and other animals.

A Rural Industries Research and Development Corporation report stated that the planting of select native plant species near horticultural production facilities may have potential for improving economics and sustainability of pest-management, in addition to providing a range of other biodiversity and public benefits⁶.

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This supports the findings from a survey of north-eastern Victorian and southern NSW landholders which found that about two thirds of respondents identified the provision of habitat for animals that control pests as a benefit from native vegetation⁷.

Shelter belts

The evidence of the benefits of shelter belts to crop production is well documented.

A report prepared for the Basalt to Bay Landcare Network in south west Victoria provides summaries of numerous studies demonstrating many different ways in which shelter belts provide landholders with economic benefit⁸. For example, increases in crop yields in Australian studies included 22% for oats and 47% for wheat in areas above 600 mm annual rainfall.

Improved property prices

Evidence from several Australian studies based on farm sales suggests that well managed riparian frontages can improve the market value of a rural property.

In one report, evidence from real estate agents suggests that well managed riparian frontages can add up to 10% of the market value of a rural property⁹.

In Victoria, a number of recent studies have found that:

- there is an optimal proportion of native vegetation influencing positive property values - about 40%
- private benefits of native vegetation are greater per unit area on small and medium-sized farms (both commercial and lifestyle) and lesser on large production-oriented farms (leading to property value increases from 5 to 16% with the optimum amount of native vegetation)
- location characteristics are important determinants of property values e.g. proximity to lakes, rivers, and parks for recreational opportunities^{10,11,12,13}.

Improved aesthetics and landholder wellbeing

Many landholders are motivated to carry out riparian works for aesthetic and environmental reasons, including the peace and beauty of having native vegetation and wildlife on the farm with some recreational benefits, such as fishing, boating and relaxing.

A Victorian riparian works evaluation report included survey results which showed that improving the aesthetic value of the riparian land was one of the top three responses given by landholders in response to why they undertook riparian works¹⁴. Other top reasons were to improve the health of the waterway and to improve overall environmental outcomes across the property.

This finding is supported by a more recent Victorian survey of landholders with Crown water frontage licences which found that the most important benefits from managing riparian land were non-commercial e.g. creation of habitat for native birds, attractive and aesthetic frontages¹⁵.



Wannon River, SW Victoria. Pre-riparian works (above) and fifteen years after riparian works (below). Photos: Glenelg Hopkins CMA

These studies also showed that regardless of a landholder's initial motivation for managing riparian land, a key outcome is often a more aesthetically pleasing farm which is highly valued by the landholder.

Further evidence can be found from the USA, where a study of 268 farmers of the mid-western watershed of Michigan, revealed that landholders were more likely to manage riparian land based on their attachment to land and their desire to conserve land for future generations rather than a motivator of receiving economic compensation¹⁶.

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Want to manage your riparian land?

More information about riparian management programs in your region can be obtained from your CMA.

East Gippsland CMA	5152 0600
West Gippsland CMA	1300 094 262
Corangamite CMA	5232 9100
Glenelg Hopkins CMA	5571 2526
Wimmera CMA	5382 1544
Mallee CMA	5051 4377
North Central CMA	5448 7124
Goulburn Broken CMA	5822 7700
North East CMA	1300 216 513
Melbourne Water*	131 722

* Melbourne Water is the waterway manager for the Port Phillip region

Further information

Fact sheet series

This is one in a series of fact sheets on the benefits for landholders in managing riparian land. Other fact sheets include a summary as well as fact sheets covering specific benefits to:

- dairy farmers
- sheep graziers
- beef cattle farmers.

The fact sheet series has been developed from a longer report investigating the benefits to landholders of undertaking riparian work¹⁷. The fact sheets and full report can be found in the [riparian land](#) section on the DELWP website.

Riparian land

More information about managing riparian land can be found on the DELWP website at: [Riparian land](#) and [Crown land leases, licences and permits](#).

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