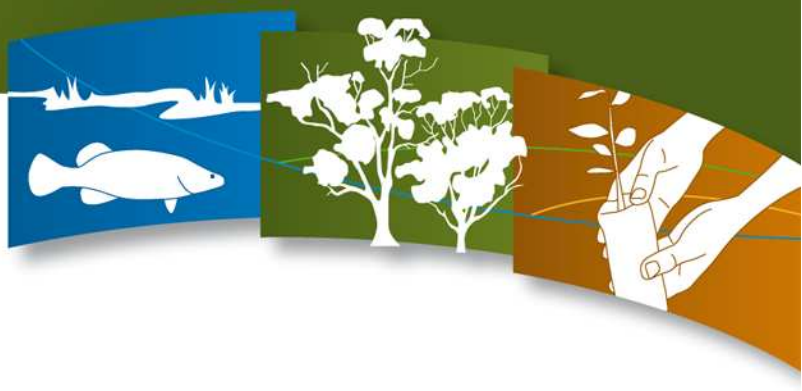
# Managing riparian land



NORTH CENTRAL
Catchment Management Authority
*Connecting Rivers, Landscapes, People*

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**What is riparian land?**

Riparian land is the land that adjoins or directly influences a body of water. It includes:

- the land immediately alongside small creeks and rivers, including the river bank itself
- gullies and dips which sometimes run with water
- areas surrounding lakes
- wetlands and river floodplains which interact with the river in times of flood.

It is important not to think of riparian land as just a narrow strip along each riverbank. Depending on the nature of the land (floodplain, gorge or valley) and the adjacent land use (national park, farming, urban housing), the width of riparian land that needs special management will range from a very narrow to a wide corridor.

*The Loddon River and adjacent riparian land.*
*Photo: Matt Jackson, North Central CMA*

**Why does riparian land need special care?**

Riparian land is often highly productive. As a result, it has often been heavily cleared and is used for cropping, grazing and irrigation. The natural vegetation on riparian land usually reflects the better soils and greater moisture found in the lower parts of the landscape. Riparian land also plays an important role in the lifecycle of many native animals and plants. It provides wildlife corridors as well as being a refuge in times of drought or fire.

By its very nature, riparian land is fragile, and performs a vital link between land and water ecosystems. Its productivity also makes it vulnerable to over-use and to practices that cause it to deteriorate, creating additional problems. Good management of riparian land can yield numerous benefits.

**Good reasons to manage your riparian land with care**

- decreased erosion
- improved water quality
- healthy ecosystems
- maintaining river courses
- stock management
- decrease in insect pests
- increase in capital values
- shelter effects
- retention of nutrients
- lowered water tables
- increased fish stocks
- decreased algal growth.

**Stock management**

Stock that are allowed free and uncontrolled access to riparian land can directly foul the water with their wastes. They also increase soil erosion by over-grazing and through the formation of bare walking tracks and camping areas. These impacts reduce water quality for downstream users. It is not uncommon for stock to fall down steep riverbanks or become bogged along the water's edge, resulting in injury or death to valuable animals. This is not only expensive for the stock owner, but can also lead to pollution of water supplies for downstream users. When water is contaminated with silt, manure or algae, animals are less inclined to drink or may contract bacterial infections from polluted water, resulting in a drop in production.

*Unrestricted stock access to the river bank.*
*Photo: Matt Jackson, North Central CMA*

**Stock management (cont'd)**

It is often not necessary to permanently exclude animals from riparian land, but is important to control their movement and to manage grazing pressure.

The simplest way of regulating animal access and grazing pressure on riparian land is to erect a fence between it and the rest of the property.

In managing stock grazing on riparian land, the aim is to maintain continuous groundcover, with enough vegetation to protect the soil surface from heavy rain and to provide a filter for sediments and manure contained in runoff. You may also wish to maintain vegetation for bank stability as well as for wildlife and instream habitat. In general, timing, intensity and duration of grazing all need to be considered.

**Timing**
Grazing should be restricted or prevented altogether when plants are starting their annual growth cycle. Grazing should occur within fenced waterway frontage when plants are either dormant, such as in winter, or when there will be less impact upon plant growth, seed and root production.

Vegetation should be spelled around the time of flowering and seed production in order to allow for continual replacement and maintenance of good vegetation cover. In addition, grazing on riparian land should be restricted or removed altogether during the period of the year when maximum rainfall is expected. This will help to ensure maintenance of the ground cover when the potential for erosion and soil loss is at its greatest.

***Intensity***

You will need to monitor the impact of grazing during the period when the animals have access to the protected river frontage. This will enable you to assess whether grazing intensity is too high or too low, and to move the stock out before vegetation degradation becomes a problem. Grazing intensity can also be managed as a tool to reduce weed populations where these are palatable, or to reduce fuel loads if fire management is an issue.

**Duration**
Continuous grazing of riparian areas all year round, which is usually the situation when no attempt is made to control stock access, gives vegetation no chance to recover. In this situation, native grasses, herbs and shrubs will eventually die out and be replaced by unpalatable, weedy species.

**Assistance for waterway fencing**

As part of a Victorian Government initiative, the North Central CMA is offering funding and technical assistance for waterway fencing to landholders along the Loddon River (from Cairn Curran Reservoir to the Murray River) and Tullaroop Creek (downstream of Tullaroop Reservoir).

In addition, supplementary planting of indigenous shrubs, grasses and aquatic plants that may have disappeared due to years of continuous grazing is available.

**Would you like to find out more?**

These incentives are delivered in a partnership arrangement between the North Central CMA and the Department of Primary Industries (DPI).

To find out more about incentives for waterway fencing and revegetation along the Loddon River and Tullaroop Creek contact:

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Or visit our website at:
**www.nccma.vic.gov.au**

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