

Riparian Forest

Threatened in the Goulburn Broken Catchment

27% of Riparian Forests have been cleared. 10% of what remains is on private land.



Figure 1. An example of Riparian Forest on the Rubicon River, Thornton, in good condition with some indicative and habitat features highlighted.

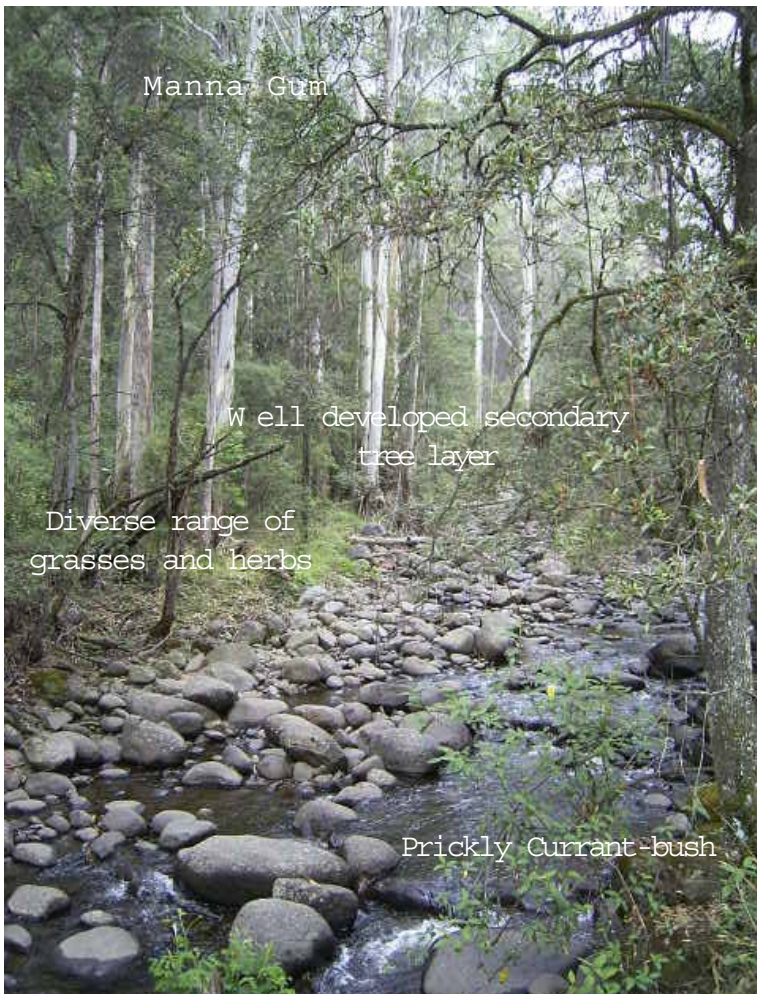


Figure 2. An example of Riparian Forest on the Rubicon River, Thornton, in good condition with some indicative and habitat features highlighted.

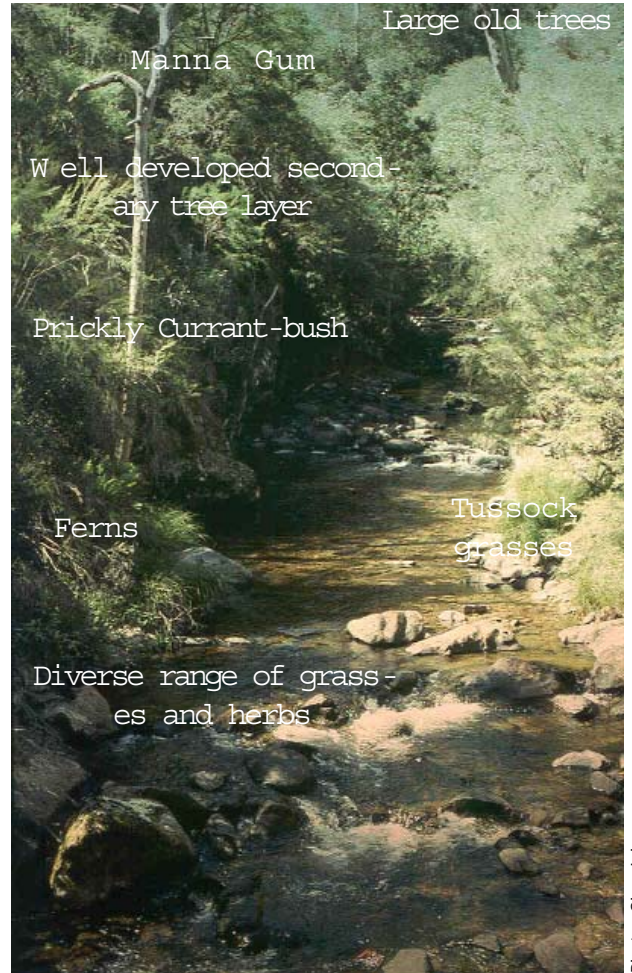


Figure 3. An example of Riparian Forest in good condition with some indicative and habitat features highlighted.



Figure 4. An example of Riparian Forest, in good condition with some indicative and habitat features highlighted.

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Description

Riparian Forest grows along river banks, the larger creeks and associated alluvial terraces in areas with an annual rainfall of 900-1800mm.

The alluvial soils range from cobbles to silts, but are mostly deep silty loams, rich in organic matter which are regularly inundated.

The overstorey forms a tall forest and typically consists of Manna Gums, with a mixture of species such as Narrow-leaf Peppermint. Eurabbie (Blue Gum) is sometimes present.

Blackwoods, Silver Wattles, Hazel Pomaderris and Tree Lomatia typically occur as a well developed secondary tree-layer.

The understorey is typically dominated dense patches of Prickly Currant-bush with a ground layer rich in grasses, ferns and herbs.

Species To Look Out For

Flora: Slender Tick-trefoil (k) and Grey Rice-flower (v).

Fauna: Spotted Tree-frog (Ec), Long-footed Potoroo (Ee) (upper reaches) and Powerful Owl (v).



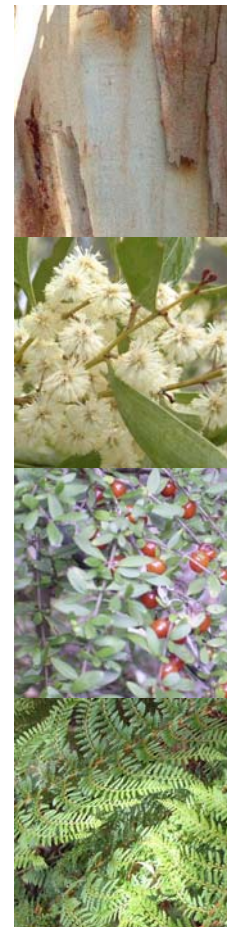
Figure 8. Spotted Tree-frog
Photo: DSE/Graeme Gillespie



Figure 9. Long-footed Potoroo
Photo: John Seedbeck co/ Viridans



Figure 10. Powerful Owl
Photo: DSE/McCann



Figures 4-7. Manna Gum, Blackwood, Prickly Currant-bush, Fern.

Photos: 6 Carla Miles and 4, 5, 7 Mary Titcumb

Why Riparian Forests are Important

By its nature, riparian land is critical to the lifecycles of many native animals and plants, it provides wildlife corridors as well as being a refuge for animals in times of drought and fire. It is fragile, and its productivity also makes it vulnerable to over-use. It performs a vital link between land and water ecosystems.

More than 27% of Riparian Forests in the Goulburn Broken Catchment have disappeared since European settlement. While only 10% of this remains on private land, private land is often adjacent to it, and has significant impacts upon it. It is important to protect the remaining area for the continued survival of the species that rely on it and for the continuation of ecological services these forests provide. The support of private landholders is essential for the ongoing conservation of Riparian Forests.

Current threats include, **poor timing of stock grazing and overgrazing** (erodes the bank, causes loss of native species, hinders native plant regeneration, disturbs the soil and increases nutrient levels), **stream bank erosion, soil disturbance** (eg. ploughing and pugging, favouring weed species), **weed invasion, pest animals** and loss of **tree and ground habitat** (through timber harvesting, tidying-up of fallen timber and firewood collection).

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Management Tips

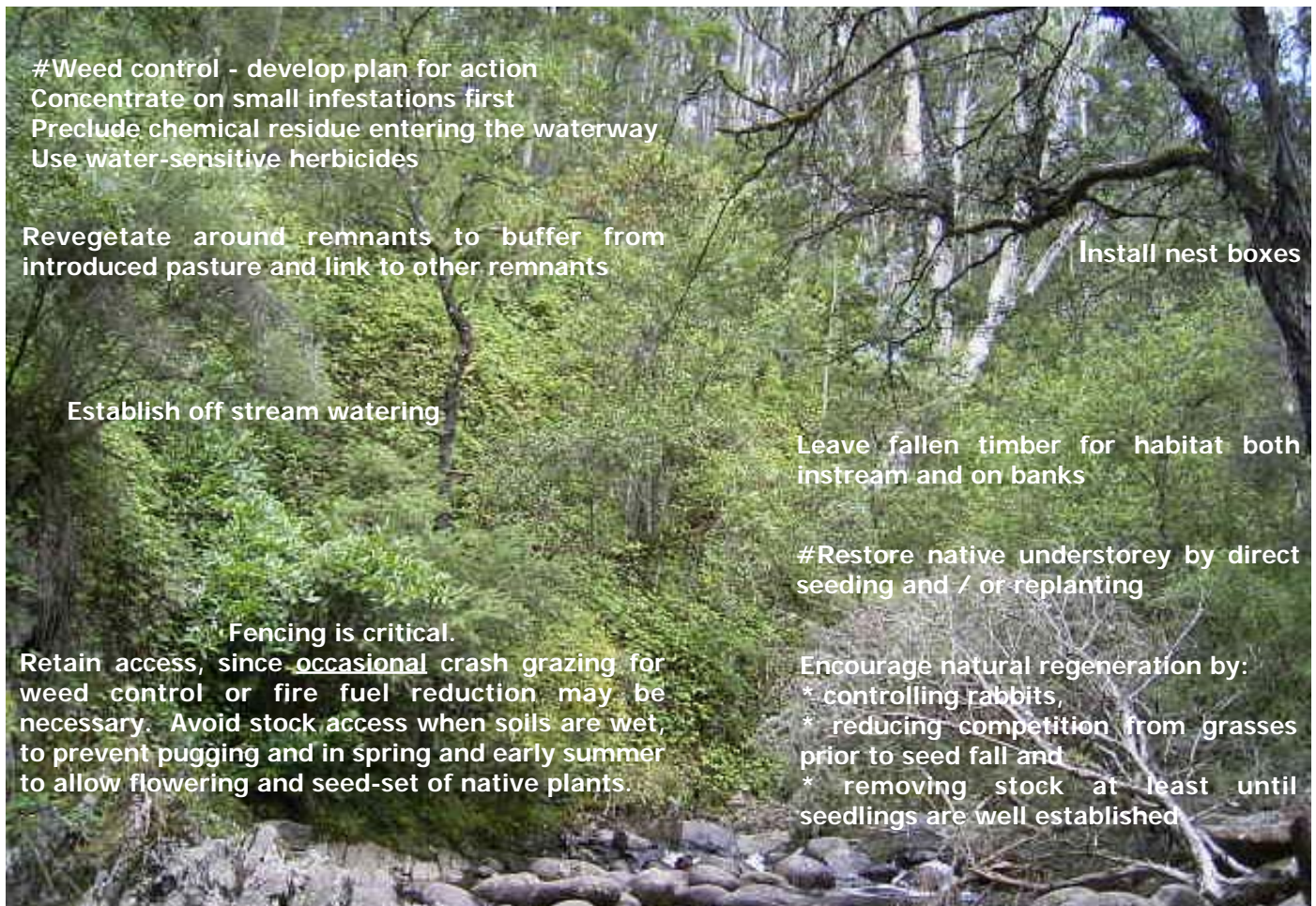


Figure 11. An example of Riparian Forest that has been invaded by Blackberries.

May require expert input in decision making and planning. See your local DSE, DPI or CMA representative for further advice.



Figure 12. An example of Riparian Forest in degraded condition with willows, Fleabane and exotic grasses. # May require expert input in decision making and planning. See your local DSE, DPI or CMA representative for further advice.

Some additional tips for erosion control

- *Stabilise bed with rock or woody debris and allow beds and bank to be colonised by grass
- *Use range of species - grasses, reeds, shrubs and trees
- *Establish vegetation as far down bank as possible as well as on the bank top.
- * No grazing



Conservation Status

Riparian Forest is **Threatened** in the Goulburn Broken Catchment

Central Victorian Uplands bioregion : **Vulnerable**

Highlands Northern Fall bioregion: **Least Concern**

Victorian Alps bioregion: **Least Concern**

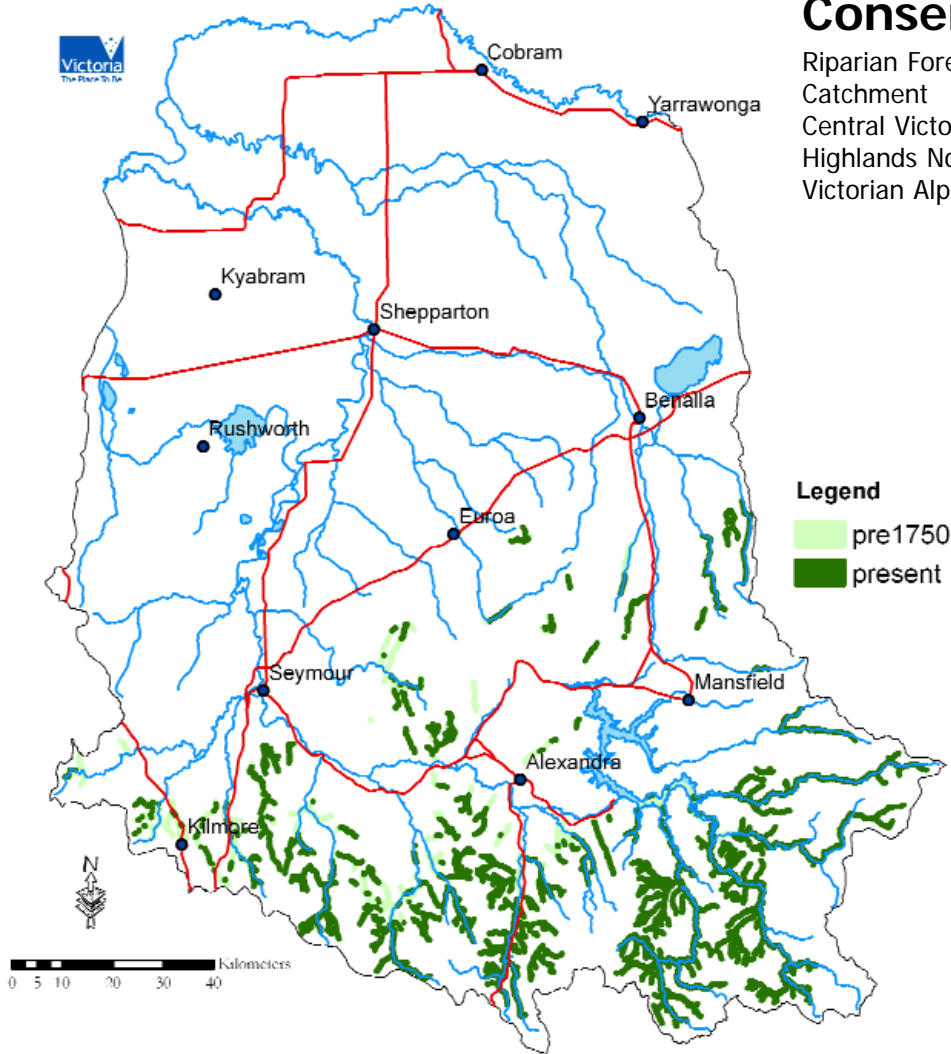


Figure 13. A representation of the pre-1750 and present day distribution of Riparian Forest and its mosaics and complexes in the Goulburn Broken Catchment. The boundaries of the vegetation have been exaggerated to allow for the small scale of the map. The map was produced from Base Data from DSE Corporate Library. The State of Victoria does not warrant the accuracy or completeness of information on this map. Any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

References:

Berwick, S. (unpublished) *Pre-1750 EVC mapping, Goulburn Broken CMA*, Department of Natural Resources and Environment, Benalla

Department of Natural Resources and Environment (2001) *Freshwater Ecosystems 3 Biodiversity Management Issues*, Department of Natural Resources and Environment, Melbourne.

Department of Sustainability and Environment (2004) *EVC Bioregional Conservation Status Table*, a support document to: Department of Natural Resources and Environment (2002) *Victoria's Native Vegetation Management - A Framework for Action Support Data*, NRE.


Land & Water Australia (2002) *River Landscapes Fact Sheets 1-13*, Land & Water Australia, Canberra.

Martin, D. and Robinson, J. (2001) Chapter 10 Enhancing streams by revegetating & erosion control from: Earl, G. et al. (2001) *Revegetation Guide for the Goulburn Broken Catchment*, Department of Natural Resources and Environment, Benalla.

Platt, S.J. (2002) *How to Plan Wildlife Landscapes: a guide for community organisations*, Department of Natural Resources and Environment, Melbourne.

Viridans Pty Ltd. (2004) *Victorian Fauna Display*, Viridans Pty Ltd., Melbourne.

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Compiled by: Mary Titcumb, Department of Sustainability and Environment

For further information about this publication, contact:

Department of Sustainability and Environment or Goulburn Broken Catchment Management Authority
Benalla (03) 5761 1611

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