

# Plains Grassy Wetland

Endangered in the Goulburn Broken Catchment

97% of Plains Grassy Wetlands have been cleared. 92% of that remains is on private land.



Photo: Martin White

Figure 1. A healthy example of Plains Grassy Wetland.



Photo: Sue Berwick

Figure 2. A healthy example of Plains Grassy Wetland.



Photo: Mary Titcumb

Figure 3. A healthy example of Plains Grassy Wetland in summer.



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## Description

These shallow seasonal wetlands occur on discrete, shallow depressions or in a mosaic with other wetlands such as Red Gum Wetlands. The heavy clay soils are periodically wet for a number of months and are dry throughout summer. They often occur amongst Plains Woodlands and Plains Grassy Woodlands.

The grassland structure of these wetlands can grade into sedgelands or herblands. The herbs and grasses flourish in the seasonally inundated conditions with very few true aquatic species.

Grass species include Common Swamp Wallaby-grass, Brown-back Wallaby-grass, Rigid Panic and Forbe Poa. Herbs include Billy Buttons, Rough Raspwort, Hairy Willow-herb, River Bluebell, and Swamp Daisy. Aquatics include Common Nardoo, Pacific Azolla, Common Spike-sedge and various Milfoil species. Rushes and sedges include Rush Sedge, Yellow Rush and Toad Rush.

## Species To Look Out For

**Flora:** Stiff Groundsel (Ee), Cane Grass (v), Water Starwort (v) and Ridged Water-Milfoil (Vv).

**Fauna:** Brolga (v), Australasian Bittern (e), Great Egret (v), Musk Duck (v), Nankeen Night Heron (n).



Figure 4. Brolga  
Photo: DSE/McCann



Figure 5. Australasian Bittern  
Photo: DSE/Peter Menkhorst



Figure 6. Musk Duck  
Photo: DSE/McCann



Figures 7-10.  
Common Swamp  
Wallaby-grass, Rigid  
Panic, Billy-button,  
Common Nardoo

Photos 7 and 8, 9: Mary  
Titcumb, 10: Sally  
Timmins.

## Why Plains Grassy Wetlands are Threatened

More than 97% of Plains Grassy Wetlands in the Goulburn Broken Catchment have disappeared since European settlement (247ha remain). Over 92% of what remains is on private land (230ha). Many of the plants and animals that rely on this habitat are now also threatened, and some are extinct. Therefore, the support of private landholders is essential for the ongoing conservation of Plains Grassy Wetlands.

Current threats include, **poor timing of stock grazing and overgrazing** (causing loss of native species through selective grazing and trampling, hinders native plant regeneration, disturbs the soil and increases nutrient levels), **tree planting in naturally treeless wetlands** (causing loss of important breeding habitat for many water birds, eg. Brolga, and alters the hydrology, and vegetation structure, hence threatening the entire system), **loss of ground habitat** (through dredging, land-filling, draining, unsustainable harvesting of Drumsticks or Billybuttons, and overgrazing), **weed invasion from adjacent areas**, soil disturbance, stock feed and stock faeces, **increased nutrients** (favours weeds and causes excessive plant growth which restricts water movement and reduces dissolved oxygen), **changes to natural flooding, temperature and flow regimes** changes floodplain functions, **difficulty in identifying wetlands** often results in inappropriate management.



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## Management Tips

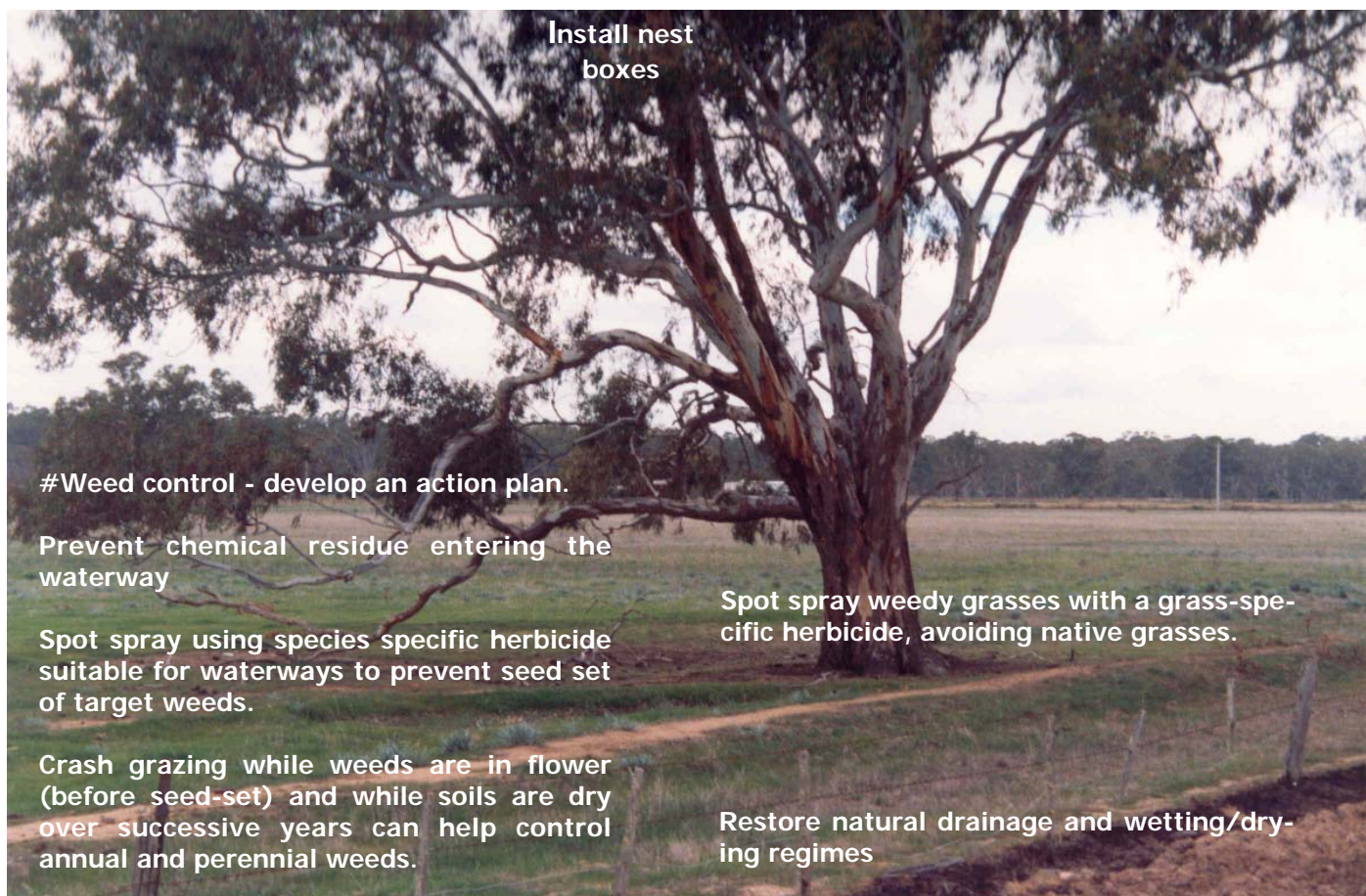


Figure 11. An example of a Plains Grassy Wetland in moderate condition, with Billybuttons still present, but dominated by introduced grasses. The natural drainage is also disturbed, a drain can be seen in the right foreground. The photograph was taken in September.

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

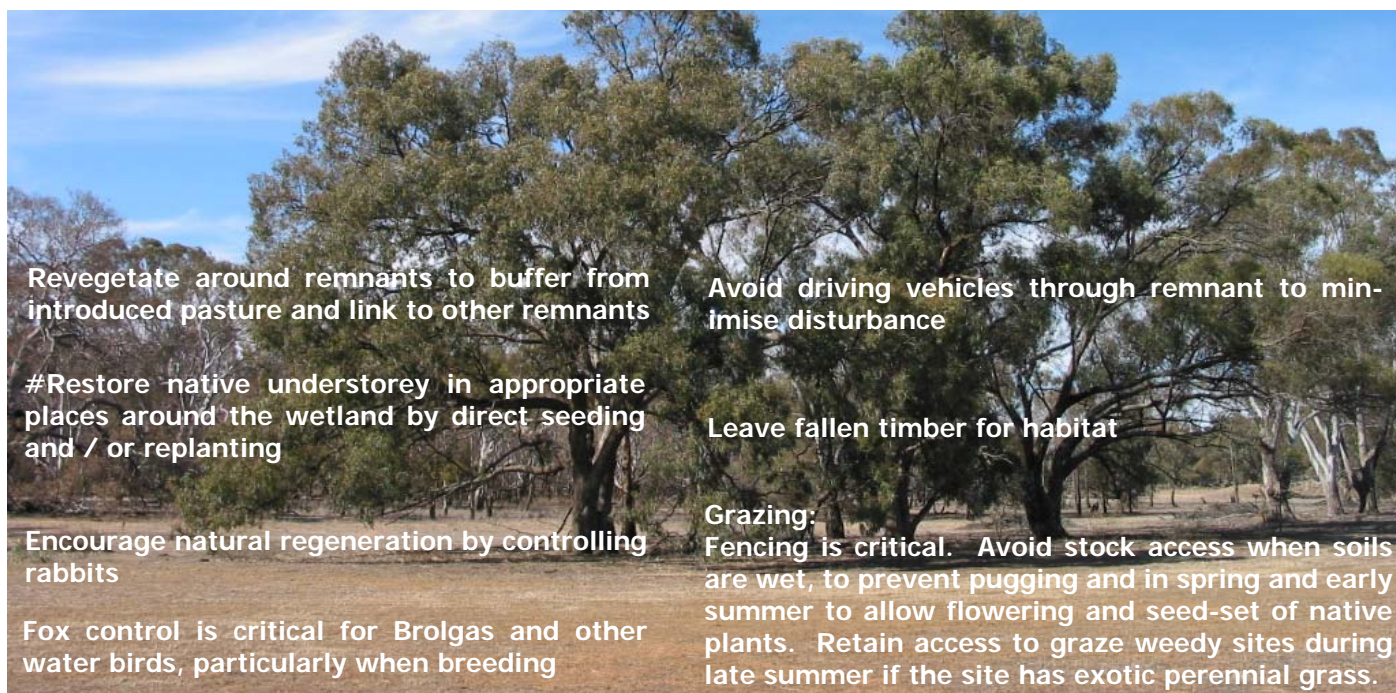


Figure 12. An example of Plains Grassy Wetland in December.

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





# Conservation Status

Plains Grassy Wetland is **Endangered** in the Goulburn Broken Catchment

- Victorian Riverina bioregion : **Endangered**
- Murray Fans bioregion: **Endangered**
- Goldfields bioregion : **Endangered**
- Central Victorian Uplands bioregion : **Endangered**
- Northern Inland Slopes bioregion : **Endangered**

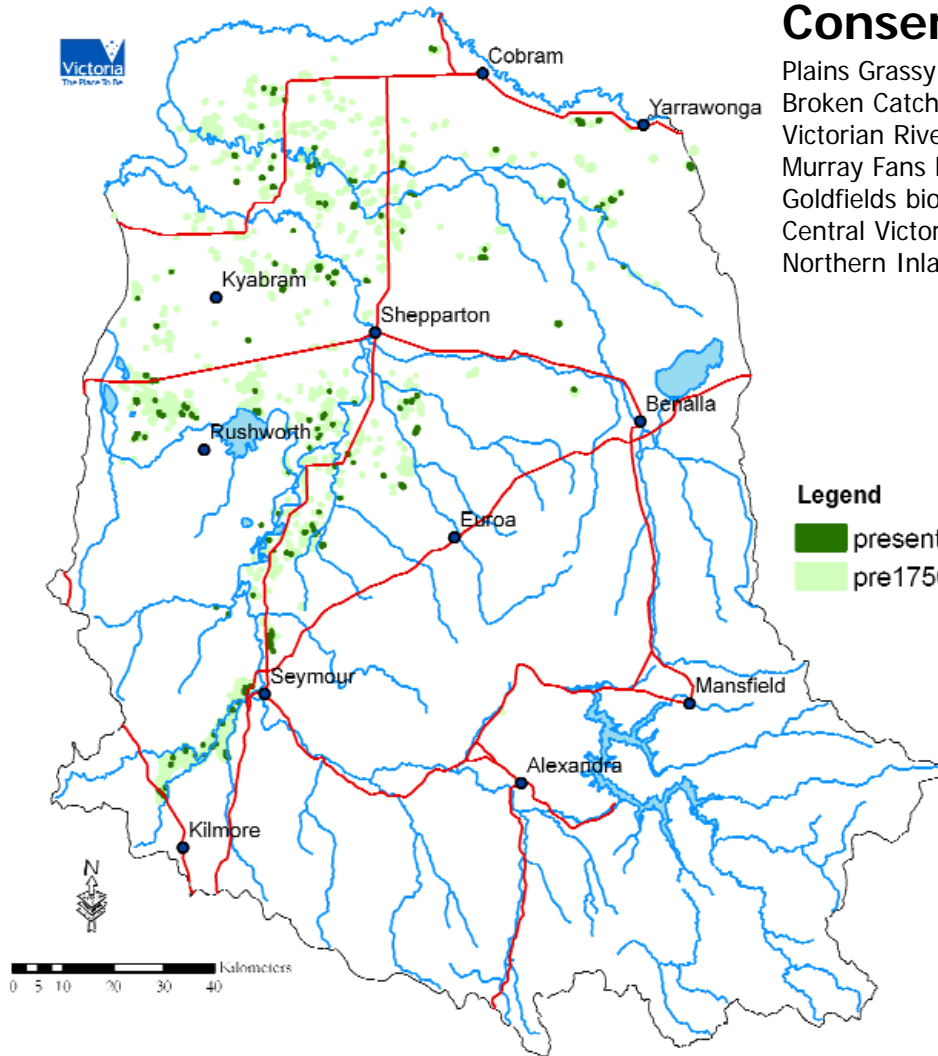


Figure 13. A representation of the pre-1750 and present day distribution of Plains Grassy Wetland and its mosaics and complexes in the Goulburn Broken Catchment. The boundaries of the vegetation have been exaggerated to allow for the small scale of the map. The map was produced from Base Data from DSE 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 Conservation and Natural Resources (1996) *Manual of Wetlands Management*, National Parks Service and Department of Natural Resources and Environment, East Melbourne.  
 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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