

Catchments



Water flows in a catchment from the hilled areas to the valleys



The darker ribbons across the drying paddocks show where the water runs after rain



A small part of the catchment of a lake



At the foot of the hill in the foreground water gathers from surrounding hills and forms the beginning of a stream.

Dry Waterways







Eroded Waterways



Lack of vegetation to hold soil together leads to erosion



Large flows have collapsed the bank on the outside bend of this stream where water flows fastest. Lack of vegetation means there is nothing to help hold the soil together.



Stock with free access to the banks of waterways contribute to soil instability and erosion



Sheep with free access to waterways depleted bank vegetation and hard hooves destabilise soils and increase erosion



A waterway in need of lots of help. Where would you start ?

Historical photos of waterways



Waterways were an important transport link in places where road or rail were difficult



Bridge over the Campaspe at Runnymede

The meandering form of waterways



Waterways follow the lowest point in the land, winding their way across landscapes





Riffles and Pools



A large pool



Pools provide deep still water as a refuge for aquatic fauna



Fast flowing riffles in shallow sections of a creek are the preferred habitat for some aquatic fauna



A rocky section of the Campaspe River at Goornong providing fast flowing riffles

Riparian Land



Land cleared for farming



Channelled waterway – highly modified



Extremely healthy and natural riparian land



Poorly managed land and very degraded riparian corridor



Putting vegetation back into the riparian corridor



Willows invading a waterway

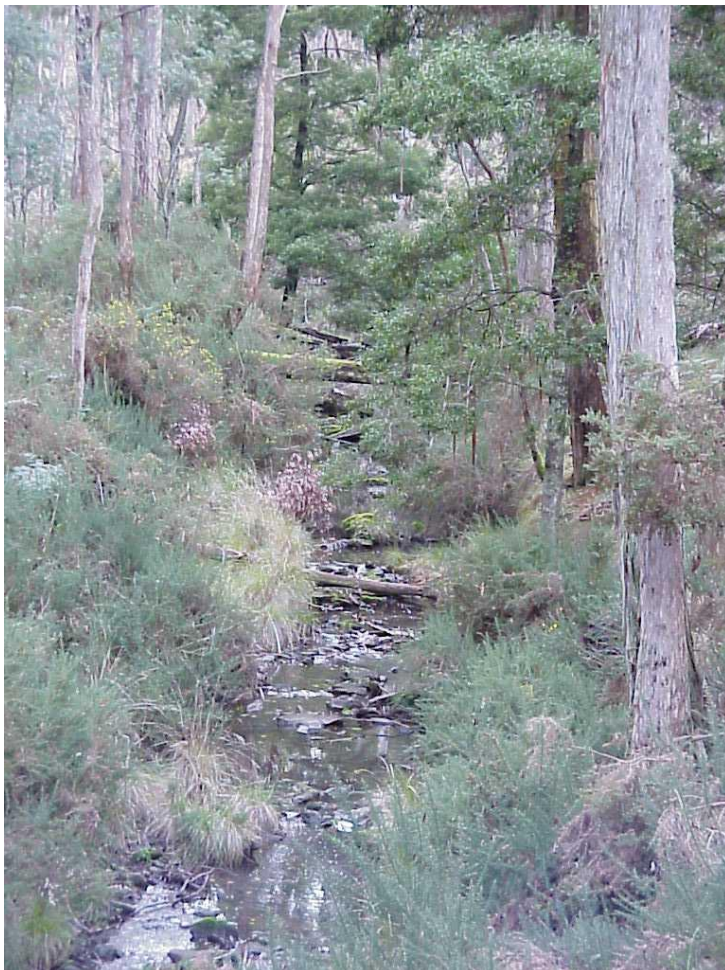
Types of waterways



A mountain stream



An inland river



The headwaters of a waterway up in forested hills



Lots of woody debris (snags) in the waterways providing excellent habitat for aquatic fauna



Native vegetation has been replaced over generations by deciduous trees



Large inland river



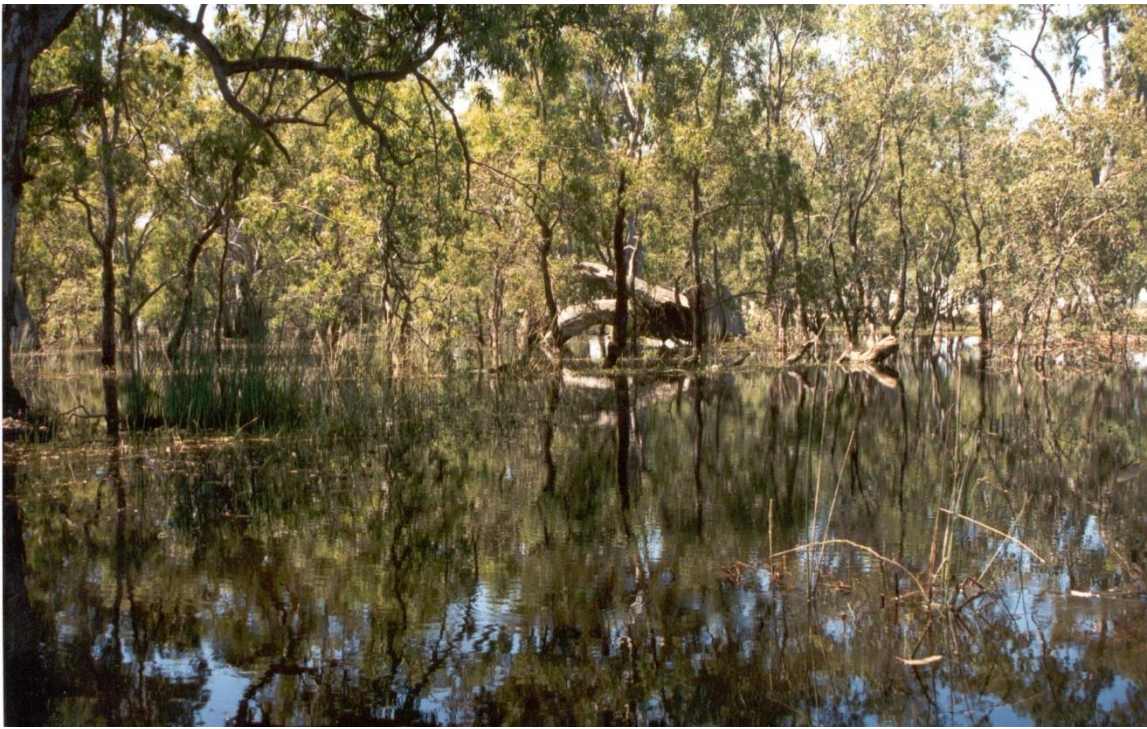
Shallow upland waterway



Small healthy waterway

Wetlands





Forested wetlands in flood





Wetlands from the air



Wetland in grasslands

Values of waterways



Recreation



Dammed for drinking water



Environmental flows for habitat values and forest health



Used for irrigated farming

Rehabilitation of waterways



A fish ladder is built in the Murray River Gunbower



Best practise farming to rehabilitate land – fencing off waterways for cropping then planting native vegetation back into the riparian land



Adding native understorey to riparian land



A rock chute is constructed to stabilise the bed and banks to prevent further erosion



Rock is added to the fast flowing bend of the waterway to prevent further erosion



Adding much needed vegetation to this saline, eroding waterway



Timer pylons can be added to waterways to slow down flows on fast flowing bends and prevent further erosion

Community education about healthy waterways



Workshops held about waterway health



Stormwater stencilling on urban drains for community education



Treeplanting events



Media coverage of waterway rehabilitation works