

Stock management on watercourses



This summary guide has been prepared to help individual landholders and the community develop a plan for stock management within riparian lands. Riparian land can be defined in a number of ways, but put simply it is “any land which adjoins, directly influences, or is influenced by a body of water” (Land & Water Australia, 2007). This is a companion to the more extensive [guide](#) and describes the main principles and practices of stock management, including fencing and water access.

Riparian land in Northern and Yorke region

The Northern and Yorke Region contains several catchments including the Willochra, Broughton, Wakefield and Light. These catchments cover most of the region and contain native riparian vegetation corridors within a largely cleared agricultural landscape. Grazing has been identified in biodiversity assessments of the riparian zone in Australia as the most extensive threatening process.

Why should we manage stock around watercourses?

Livestock overgrazing within riparian areas causes major problems with erosion and siltation and results in poor water quality. Uncontrolled grazing near the water's edge leads to increased nutrient concentrations from stock excrement; high bacterial and protozoan loads; and high turbidity in water. Streams contaminated with livestock waste can negatively affect: human health through the spread of disease; in-stream fauna; and stock production. Riparian land is often a very diverse part of the landscape and usually contains various tree and shrub species as well as ground cover plants such as grasses, sedges and herbs. The major pressure on riparian lands is the direct grazing and trampling of ground covers, shrubs and saplings. This results in a loss of cover, vegetation biomass and grazing-sensitive species as well as a decline in native plant species. This disruption and degeneration of ecosystem function in riparian zones cannot be easily reversed. Livestock can also promote weed invasion, soil compaction and the loss of aquatic organisms.

Managing stock access and grazing pressure

Rapid results can be seen when livestock are managed and sustainable grazing practices are implemented. The most effective way to manage uncontrolled livestock in riparian land is to prevent or control stock access with fencing. At sites with a long history of grazing, riparian vegetation may have adapted to this form of disturbance. In these cases livestock exclusion can lead to changes in the vegetation and invasion by woody plants and reduced species diversity. Sustainable grazing that does not affect vegetation cover should be the long term aim of riparian land management. There are two main methods to control stock access and grazing pressure within riparian lands which include fencing and designating watering points.

1. Fencing

Fencing is the most practical way of regulating animal access and grazing pressure on riparian land. Fencing can be used by landholders to manage stock access according to need and available feed. The fencing type and location will depend on type of stock; when and how landholders want to use riparian area; the size and shape of the watercourse channel; flood frequency; and the size of flood peak.

Hanging fences – are built across narrow watercourses so that stock cannot walk along the watercourse to bypass the fence line. These can be cheaply and easily repaired or replaced if damaged.

Electric fences – are also designed for use along and across watercourses. Electric fences are usually efficient for areas that often flood as they are designed to survive a flood.

Drop fences – are designed to be manually operated under the pressure of floodwater and debris. These fences are portable and simple to pull back up and reattach to their anchor points.

Electronic fences – are generally used to control cattle, which wear a receiver developed in the form of an ear-tag. Transmitter boxes form a boundary between the riparian area and rest of the paddock. Ear-tag receivers produce an audio signal initially

and then apply an electric stimulus to the animal's ear when cattle enter the protected area.

2. Watering points

Creating an alternate watering point for livestock is another option to protect riparian areas. Carefully located, shaded watering points and supplementary feeding stations can be used as an alternative to fencing.

These can include:

- formed access point – carefully selected formed water points can be a relatively cheap option that can significantly reduce stock impact on riparian areas.
- alternative water supply – providing water from a dam upslope or a reticulated water scheme is often the most effective water supply option.
- pumping watercourse or groundwater – formed aquifers may provide good quality water for a large number of animals. This water can be accessed by range of different windmills or pumps, including nose pumps and solar pumps

More information

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